

The Rehabilitation of the Economy of Uganda

a report by a Commonwealth Team of Experts
volume two



Commonwealth Secretariat

The Rehabilitation of the Economy of Uganda

VOLUME TWO

A Report by

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Disclaimer

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SECTOR PAPERS

GENERAL ECONOMIC CONDITIONS

Gerry Helleiner and D.G.R. Belshaw

Introduction

The conditions to be found in the various sectors of the Ugandan economy are described in considerable detail in the sector papers which follow. It may nevertheless be helpful to provide an overview of recent economic changes and the present state of the economy so that the individual sector analyses may be placed in perspective. No attempt will be made to recount here the details of the economic and political policies of the 1970s. It is assumed that the reader is sufficiently familiar with the Nakivubo Pronouncements, the 'economic war', the increasingly chaotic internal conditions created by a brutal and oppressive leadership, and the eventual liberation. Attention will be confined to the economic conditions which were their result. Part 1 considers some of the distributional and structural characteristics of the Uganda economy from which any analysis must begin. Part 2 describes events in the Uganda economy up to the end of the liberation war. In Part 3 the present state of the economy is described and the bare elements of a programme for its rehabilitation are presented.

Distribution, Poverty and the Structure of the Uganda Economy

2. Uganda's economy is essentially an agrarian one. Only about 7% of the population lives in towns of over 1,000 people. Virtually all its merchandise exports originate in the agricultural sector, as do substantial proportions of the inputs, food, and tax revenues upon which the towns, and the industries and service activities in them depend. Overall economic performance is therefore substantially a matter of agricultural performance. While import-substituting industrialisation has made a significant impact upon Uganda's imports, this has merely altered the composition of the import bill. Uganda is still dependent on imports for fuel, many industrial and agricultural imports, and most of its machinery and equipment; and these must still be paid for by agricultural exports.

3. While extremes of absolute poverty are avoided in Uganda in normal times, it would be a mistake to consider agriculture as an undifferentiated whole. There are important inter-regional differences in the availability of land and in crop mix; and there are important distinctions to be made between large and small-scale farmers (as well as between large and small-scale urban businesses). These elements of differentiation have implications for income distribution and thus for the political economy. They must be incorporated into any attempts to assess overall conditions or develop economic strategies at either the local or the national level.

4. In particular, one must consider progress and problems for:

- the people of the poorest and most vulnerable districts of the country;
- small-scale farmers and businesses, which are usually in any case deserving of priority attention on grounds of economic efficiency.

5. Poverty levels can be crudely proxied by measures of the carrying capacity of the land and by the extent of net out-migration, such as are shown in Table 1.1. Allowing for the skewed nature of the rights of land use, it can safely be assumed that in any area where population is approaching 70% of the maximum potential carrying capacity, a high proportion of new entrants will be facing problems of access to resources or employment. The larger element of high-density urban settlement in East and West Mengo, make them a special case. The other three areas listed at the top of Table 1.1 are presumably faced with problems of this sort. The presumption is increased for particular parts within these areas where pressure on land resources is even greater i.e. Bukedi, Kigezi, Teso and Bugisu Districts, and where net out-migration has been occurring.

6. The relative prosperity of different communities in the rural areas is also closely tied up in the short to medium term with the fortunes of individual products. A high price or accelerated development in coffee, for instance, will directly benefit only certain areas, and indirectly only the dependent urban areas, in any significant and visible manner.

Table 1.1
Indicators of Land and Resource Scarcity by District

District	(1) Estimated net migration to other districts 1959 to 1969 (minus means out-migration)	(2) Estimated 1981 population as % of maximum potential popu- lation on the land
	(000's)	(%)
Busoga	52	94
Bukedi	-20	
East Mengo	99	82
West Mengo	126	
Kigezi	-100	
Ankole	38	81
Masaka	42	
Teso		
Bugisu	-8	68
Sebei	2	
West Nile	-43	57
Madi	7	
Bunyoro	98	
Toro	74	41
Mubende	38	
Karamoja	9	37
Lango	-5	
Acholi	30	34

Source: 1. Republic of Uganda, Report on the 1969 Population Census, Vol. IV. The Analytical Report, Statistics Division 1976.

2. Calculated from FAO 1976; Table 1 and Annex V, Table 4.

Although differences in regional prosperity arising in this way have contributed significantly to political and social tensions in Uganda in the past, no systematic attempt has ever been made to design and operate a rational rural development strategy, including pricing policies and investment projects, which would both reduce the extent of these disparities and at the same time encourage the movement of resources into activities which have become socially and privately more profitable.

7. Data on relative roles and income distribution as between small and large-scale farms and businesses are hard to find in Uganda. Table 1.2 presents our estimates of the relevant shares in different divisions of the agricultural sector. Compared with neighbouring Kenya, the overall contribution of the large-scale sector to agricultural production has been much less significant. Clearly the major source of income and of economic progress in Uganda has been the small-scale farmers. We have been unable to put together equivalent data on small-scale urban activities. It is important to recognise the implicit bias in favour of large-scale industrial and service establishments that can arise from the fact that information on them can more easily be assembled.

8. In terms of relative priorities for development, the small-scale sector in general enjoys the advantages of the low cost of self-employed family labour, a long-attested responsiveness to strong economic incentives and in several cases a backlog of appropriate innovations in terms of technique or enterprise which are likely to be adopted on an increasing scale. Also the small-scale sector is both the residual area of gainful employment for that majority of new entrants to the labour force who fail to find employment in the formal wage-earning sector, and the repository of the majority of the lowest income groups in the economy. On grounds of both economic efficiency and social equity, the case for priority to be given to the small farm sector is extremely persuasive except in those limited cases where a feasible small-scale technology is not available or 'hybrid' modes of production (e.g. outgrower schemes centred on nucleus estates) offer the optimal solution. We have been unable adequately to assess the possible role of small and medium scale urban activities, but we are convinced that they deserve more attention than they have received.

Table 1.2

Approximate Shares by System of Output of Major
Agricultural Sector Products: Uganda 1976¹

Products	Value in 1976 (Shs. m.)	Small Scale Systems Share (%)	Value (Shs. m.)	Large-Scale Systems Share (%)	Value (Shs. m.)
Coffee	2510	95*	2384	5*	126
Cotton	200	100	200	-	-
Tea	89	40*	36	60*	53
Sugar & Jaggery	27*	55*	15	45	12
Tobacco	15*	100	15	-	-
Crops Sub-total	2841		2650		191
Grade Beef Cattle	250	-	-	100	250
Grade Dairy Cattle	105	25*	26	75*	79
Traditional Cattle					
a) Beef	900	90*	810	10*	90
b) Milk	595	90*	535	10*	60
Livestock Sub-total	1850		1371		479
GRAND TOTAL	4691	86	4021	14	670

Notes: 1. In 1976 there were abnormally low levels of production of cotton in the small-scale sector and sugar in the large-scale sector.

2. Methodology:

Coffee and Tea: Export values, 1976.

Cotton: Export value 1976 plus 10% for value of seed, cake and oil.

Tobacco: 5m. kgs. x Shs. 3/kg. delivered to factory.

Sugar: 40,000 tons x import parity price £300 per tonne.

Jaggery: 150 factories x 500 tonnes/plant p a x £200/tonne.

Grade Beef Cattle: 10,000 tonnes* (1) x Shs. 25*/kg. (2)

Traditional Cattle (beef): 60,000 tonnes* (1) x Shs. 15*/kg. (2).

Grade Dairy Cattle: 30m. litres (3) x 3/50/litre (2).

Traditional Cattle: 170m. litres (3) x 3/50/litre (2).

*Rough estimates

Sources: (1) African Yearbook Statistical Survey, p. 1037.

(2) Action Programme, p. 57.

(3) Survey of Economic Conditions in 1971, p. 77.

9. Data scarcities make it very difficult to assess the overall distributional implications of recent events in the Ugandan economy. Analysis must therefore be based to an even greater extent than usual, upon fairly aggregative data together with qualitative assessments.

General Economic Conditions: 1970/79

10. Virtually all indicators of economic activity show a downward trend from the early 1970s onwards, with some acceleration downward after 1973. GDP figures are of dubious quality and do not extend beyond 1976/77. We have therefore relied instead upon such measures as the volume of major types of industrial production, electricity consumption, the volume of output of major primary products, and railway traffic (Tables 1.3 - 6).

Table 1.3
Output of Selected Manufactures: 1970, 1975, 1977-8

	Unit	1970	1975	1977-* 1978	1977-78 as % of 1970
Cotton and other fabrics	m. linear metres	54.6	39.1	30.3	55
Blankets	000s	1164	322	165	14
Socks & stockings	000 dozen	1246	261	290*	23
Soap	000 tonnes	12.9	3.6	1.2	9
Paper	000 tonnes	1603+	1805	1380	86
Cooking oil	000 tonnes	13.0	6.1	1.5	11
Paints	000 litres	1660	852	586*	35
Matches	000 cartons	49.3	31.4	8.1	16
Cement	000 tonnes	191	98	73	38
Superphosphates	000 tonnes	24.8	4.0	0	0
Corrugated iron sheets	000 tonnes	11.9	1.4	0.8	7
M.S. rounds squares etc.	000 tonnes	17.6	6.3	7.9*	45
Beer	m. litres	27.8	38.8	22.1*	79
Waragi	000 tonnes	563	859	420	75
Cigarettes	million	1536	1754	1867*	122

* Asterisked figures refer to 1977, all others are for 1978
+ 1972

Source: Industry - level discussions.

Table 1.4
Electricity Consumption, 1970, 1974, 1978
(millions of kwh)

	<u>1970</u>	<u>1974</u>	<u>1978</u>
Industrial Sector	277	243	161
TOTAL	415	398	333

Source: Uganda Electricity Board

Table 1.5
Production of Selected Primary Products, 1970, 1975, 1978
(000 tonnes)

	<u>1970/71</u>	<u>1975/76</u>	<u>1978/79</u>
Tobacco	5.0+	3.6	1.5
Tea	18.2	18.3	10.9
Sugar	144	24	12
Cotton	76.3	13.8**	11.1*
Coffee - robusta	159.3	123.1	75.0*
- arabica	16.2	14.0	5.0*
Blister Copper	17.0	8.2	2.3

* Estimated by relevant Marketing Board for 1978/79 season, and excluding output not sold through official channels.

** 1976/77 season (last actual figures).

+ 1972

Source: Various agencies and Ministries of the Government of Uganda

Table 1.6

Uganda Railways Traffic Volumes 1971-78 (All Stations)

Year	Passengers (000s)	Goods Forwarded (000 tonnes)	Goods Received (000 tonnes)
1971	552	1,030	786*
1975	2,007	493	949
1978	866	130	287

* This number is reported in the source as 1,786 thousands of tonnes

Source: Uganda Railways Corporation, Rehabilitation, Improvement and Development, 1979/81

11. Trade statistics which would ordinarily provide further indication of recent trends have unfortunately not been available since July 1977, at which time the East African trade statistics system broke down; work is now under way towards the provision of the relevant data through the Kenyan customs authorities in Mombasa. In the meantime, it is possible to work with volume and sales data for the major exports provided by the relevant marketing authorities (coffee, cotton, tea, copper, etc.); and import volume data for some key items, like petroleum products, provided by the relevant importing firms. Table 1.7 shows import composition in the last full year for which there are complete data. Table 1.8 shows export values in recent years and the overwhelming, and growing, dependence upon coffee.

Table 1.7

Ugandan Import Structure, by End-Use Category, 1976

	%
Food, drink and tobacco	6.7
Intermediate goods	20.1
Machinery and equipment	24.3
Consumer manufactures	19.8
Construction materials	3.7
Fuels	25.3
TOTAL	100.0

Source: Office of Statistics

Table 1.8
Uganda Principal Exports, 1974-78
(Shs. million)

	1974	1975	1976	1977	1978
Coffee	1661	1434	2236	4103	2332
Cotton	272	202	194	132	148
Tea	110	121	103	210	64
Copper	121	70	59	n a	n a

Sources: Office of Statistics, Coffee Marketing Board,
Lint Marketing Board, Uganda Tea Authority.

Table 1.9
Selected Kampala Official and Free Market Prices, May 1979

	Official Shs.	Free Market Shs.
Salt (1 kilo)	2.60	20.00
Laundry soap (bar)	8.00	40.00
Maize meal (1 kilo)	7.50	17.50
Sugar (1 kilo)	15.00	40.00
Bread ($\frac{1}{2}$ kilo)	7.00	20.00

Source: Commonwealth Team

12. Inflation in domestic prices can be measured by the official price series although this index substantially understates its true dimensions because of its use of official prices, and other aspects of the methodology of its construction. We have attempted to gather more current free market price data for a few items on a casual basis; and these investigations confirm our impression that the official price series vastly understates the actual rate of price change, and that 'ruling' prices are typically quite different from the official ones (see Table 1.9). For comparative purposes we also record the recent price changes in neighbouring Kenya and Tanzania (Table 1.10). It is evident that recent Uganda price inflation has been at a substantially greater rate than in either Kenya or Tanzania. Prices soared particularly in the last months of the Amin government and during and immediately after the liberation war; since they have now returned roughly to the levels of the middle of 1978 we have not used available price data for this latest period.

13. Monetary survey data are apparently of good quality. Money supply and its components continued to rise rapidly in recent years despite the decline in the volume of economic activity. It rose twice as fast in Uganda as in Kenya and Tanzania, both of which were - unlike Uganda - experiencing economic growth.

14. Productive capacity in the various sectors of the monetary economy has been greatly reduced through the gradual depreciation of assets in consequence of inadequate maintenance, absence of spare parts, and deteriorating infrastructure. This depreciation has been spared. Productive potential at the small farm level seems, however, to

be relatively intact. Agricultural inputs have certainly been lacking. But food production for sale has increased in areas with access to urban markets in response to the altered incentive structure; coffee production potential remains high; cotton is an annual crop which, while severely cut back at present, would come back with adequate incentives. Estate production capacity, being more capital intensive, has deteriorated considerably, more than smallholder agriculture through lack of, or inadequate, maintenance, and labour shortages at prevailing wage rates. Overall agricultural capacity has thus been reduced, primarily because of growing bottlenecks at the transport and processing stages, rather than at the production level. In the industrial sector (including mining), production of almost all products steadily fell to levels far below those previously attained. Industrial capacity was increasingly constrained in the short-run by depreciated plant and equipment and shortages of spare parts and key inputs.

Table 1.10

Consumer Price Indices, Kenya, Tanzania, Uganda, 1978
(1971=100)

Kenya, lower income group, Nairobi	242+
Tanzania, all families, urban areas	390*
Uganda, low-income Kampala	511**

+ Third quarter

* Average for 1978

** Fourth quarter

Source: International Financial Statistics, Office of Statistics.

Table 1.11

Growth in Money Supply, East Africa, 1971/78

	1971	1975	1978	March 1979
Uganda (Shs. m.)	1160	3252	7084	7808
Uganda (1971=100)	100	280	611	673
Kenya (1971=100)	100	175	356	n a
Tanzania (1971=100)	100	207	341	n a

Source: IMF, International Financial Statistics,
Bank of Uganda, Bank of Tanzania,
Control Bank of Kenya.

15. Formal sector wage rates have not begun to keep pace with the rate of inflation; the real minimum wage stood in 1978 at only 20% of the level in 1970 (see Table 1.2). This has, not surprisingly, turned labourers away from wage employment. Among those no longer attracted by these rates of pay are migrant workers, who used to come from Rwanda and Burundi to work on Ugandan estates. Uncontrolled wage rates in the informal sector are nowhere formally recorded, but they appear to have risen a little more to meet labour market requirements than did the official wages. It is hardly surprising that so many wage and salary earners increasingly resorted to other non-wage or informal sector activities in order to maintain their incomes. There is little doubt that there has been a significant reduction in real labour inputs per worker i.e., a

decline in labour productivity, in the formal sector in response to these reductions in real wages. Uganda appears to be a most unusual case in which the incentive system has increasingly favoured migration out of the formal sector. Overt urban unemployment resulting from large numbers of school leavers and others waiting and searching for attractive formal sector jobs has been relatively insignificant. Unemployment has instead taken the disguised form of low productivity activity in both the formal and informal sectors.

16. Official prices for various imported products and for foreign exchange itself, have been sufficiently below prevailing free market prices for 'rationing' to be required, and substantial premia have been earned by those with access to the officially priced goods. There have been very high returns, therefore, from positions of influence and from queuing as well as from smuggling. For many, magendo became a way of life. Controlled selling prices for output also imply losses for parastatal bodies (which subsidise those with access to their sales), and for many cooperative unions and processors whose input prices are also controlled.

Table 1.12

Real Returns from Urban Wage-Earning and Legal Cash Crop Sales

	1970/71	1975/76	1978
Cost of living index, Kampala low-income, (1970=100)	100	346*	785**
Minimum wage index,	100	140	154
- deflated by low-income price index	100	40	20
Official grower price index, robusta coffee, kiboko,	100	118	294
- deflated by low-income price index	100	34	37
Official grower price index, cotton	100	152	400
- deflated by low-income price index	100	44	51
Average realised export price index, tea,	100 (1972)	117	121
- deflated by low-income price index	100	34	15
Kampala low-income food price index	100	381*	1238
- deflated by low-income price index	100	110	158

* Average of 1975 and 1976 indices

** Average for the year

Source: Office of Statistics, Commonwealth Team figures

17. Producer prices for agricultural products have not kept pace with inflation either (see Table 1.12). The result has been reduced deliveries of virtually all the export crops for which prices are controlled. Implicit in these reduced deliveries are: altered crop-mix (towards food crops), failure to harvest, stockpiling, and illicit sales (for smuggling). There have been and continue to be substantial incentives for illicit sales and trading in agricultural export products.

18. There has thus been a steady decline in economic activity in the urban and monetary economy, even more pronounced if measured in per capita terms, and in legal,

formal sector activity. This has only been partially offset by the corresponding upsurge in food production, mainly in the rural areas, and in magendo activity. The Ugandan economy was clearly operating at levels further and further from its real productive potential. In the real sense it became increasingly distorted and underemployed.

19. These changes have produced a gradual 'sinking' of the organised, legal, and monetary sector in the overall economy. Official statistics bore less and less relation to the realities of economic life; fewer and fewer transactions were recorded. The Government could acquire less and less of the total product through conventional revenue-raising techniques, and was forced to rely increasingly upon monetary expansion for its needs. One might make a case that the economy's massive 'retreat into the informal sector' constituted a sensible private response to the oppressive government which controlled the formal one. But it has probably developed habits of accepted illegality, subterfuge and evasion which will be difficult for even the most honourable of governments to overcome.

20. Most severely hit by the overall decline in the Ugandan economy were those with the least capacity to protect themselves against it. Rural dwellers in the poorest parts of the country found themselves with fewer opportunities for employment elsewhere, and with cutbacks in such services as they might previously have enjoyed. Urban workers without influence or access to capital or land have also suffered as their real earnings declined. Those who had smuggling opportunities (because of their geographic placement), and those in positions of influence with respect to import licenses, foreign exchange allocations, and the allocations of controlled-price goods have fared relatively comfortably.

21. External pressures added to the difficulties of the Ugandan economy during much of the 1970s. The increases in oil prices and the breakup of the East African Community, with the attendant deterioration in relations with Kenya (on which Uganda is totally dependent for its access to world markets) were severe blows. On the other hand, the coffee prices boom of 1976/77 provided the Ugandan economy with a brief reprieve. The revenues accruing to the government because of the favourable coffee prices were totally mismanaged, and the decline of the economy continued.

22. By the end of March 1979, official Ugandan foreign exchange reserves totalled Shs. 154m., or about one month's worth of the value of 1971 inputs. Allowing for price changes, these reserves amounted in real terms to about 10 days' worth of imports at the 1971 volumes. At the same time arrears on external debt servicing and overdue payments on external invisible account had reached over Shs. 900m. - many times the value of reserves.

23. Financial mismanagement will be described in another paper. But it is important to note here that governmental mismanagement of its own affairs extended - through its directives and pressures - to that of parastatal financial and productive enterprises, which were forced or went of their own accord into activities for which there was no prospect of economic viability. The result has been a massive accumulation of debt arrears and bad debt in parastatal institutions and cooperatives unions.

24. The principal elements of the damage done to the economy during the war and immediately thereafter were:

- a quantum decline in all parts of the country in the availability of transport vehicles - for crop movement, goods distribution, administration, and other purposes - below even the inadequate levels of early 1979;
- a major disruption in the administrative machinery of government and non-government organisations, in consequence of the loss of office equipment, supplies, and records;
- loss of stocks, input supplies, maintenance facilities, and other physical forms of working capital in almost all monetary-sector economic and social institutions;
- severe devastation of several urban centres - Masaka, Mbarara, Lira,

Gulu, Bombo, Masindi, Seroti.

25. Some portion of the stock, equipment and vehicle losses involved internal 'redistribution' rather than outright loss to the economy. It is possible to buy some looted items on informal sector markets to this day. The greater part of 1979 losses, however, would seem to be 'national losses' in the sense that goods were physically destroyed or damaged, or lost to former Ugandans now in exile or to non-nationals. Even those which were 'redistributive' in character have severely disrupted the normal functioning of the money economy.

The Present State of the Economy

26. The war damage and looting losses of 1979 have left the Ugandan monetary economy, already greatly weakened and distorted over the previous eight years, in a precarious state. As before, non-monetary activities are relatively lightly affected by the present crisis.

27. The structure of incentives which characterised the pre-war period is still in place - favouring smuggling and illegal activities at the expense of legitimate ones; and food production at the expense of cash crops. But the level of 'legitimate' monetary sector activity has now sunk to unprecedentedly low levels. Much of 'official' commerce and industry has come to a standstill. Some incomes are being maintained through increased reliance on domestic food production, continued private smuggling of coffee and other goods, and some pockets of continued industrial activity. The Government is maintaining itself through the use of its reserves in the IMF, the sale of accumulated coffee stocks and the use of limited emergency aid and credits from foreign governments and banks. It has also suspended payments on external debt account, use of emergency foreign aid and credits. The government administration is seeking quickly to re-establish control over economic management through the reconstruction of normal planning and budgetary procedures. Only when this has been done can the necessary policy decisions be taken and the reconstruction of the monetary economy begin.

28. The reduction in trader harassment and the resumption of the flow of petroleum and other imports have brought urban price levels down considerably from the dizzy heights they had reached in late 1978 and early 1979. Imported items are still only available, however, at magendo prices.

29. In addition to the difficulties described above, the Ugandan economy is now faced with the following further problems:

- Many government, parastatal, cooperative and private sector employees have not been paid wages for several months, and employers have no liquidity with which to pay them.
- Commercial banks are not lending significant amounts to employers, whether private or public, unless they are clearly credit-worthy. The reintroduction of 'sound' financial management has reduced the flow of capital to enterprises on the margin (or below it) of financial viability (the number of which has increased in consequence of the damage described above); and the Bank of Uganda has imposed upper bounds upon the rate of withdrawal of bank deposits as well as stricter restrictions on advances.
- The majority of the cooperative unions (many of which were already in great difficulty because of control over their margins, declining throughput, and frequent mismanagement) have suffered further looting and other losses which render them unable to raise or, in some cases, to handle the usual crop finance.
- There have been virtually no deliveries of coffee to the Coffee Marketing Board, which has the liquidity to purchase it, in the past three months; at the same time, the movement of Marketing Board stocks to export markets has been constrained by obstruction on the Kenya border. There are still long border delays even for the high cost Kenya lorries which have been

hired to move Ugandan coffee to Mombasa; and, while trains are now moving through Kenya to Mombasa, they do so at a rate of only two per week.

- The extreme shortage of foreign exchange still leaves unmet the needs of Ugandan industry for imported inputs and spare parts, with the result that they cannot resume reasonable levels of production. Stocks of inputs for some of the industries which are still operating have fallen so low that cessation of activities appears inevitable in the next few weeks.
- The same foreign exchange scarcity, together with the looting of stocks, and the unresolved question of the ownership of 'abandoned' (sometimes twice 'abandoned') shops, leave major shortages of wage-goods in the urban 'legal' sector, and consequent high prices on free markets and further incentive for smuggling and magendo trading.

30. A reconstruction programme must begin with a policy package containing at least the following elements:

- (i) a major restructuring of incentives to reduce the attraction of magendo activity and restore returns to legitimate monetary sector activities, particularly the sale of cash crops through official channels;
- (ii) a crash programme to provide key inputs (especially hoes); adequate transport, storage and processing facilities; and the necessary crop finance, for the agricultural export sector;
- (iii) the provision of adequate liquidity to key public, parastatal and private employers, while increasing supervision and control over its use;
- (iv) the re-establishment of firm governmental planning, management, and control in the national interest of: foreign exchange use; external debt, foreign contracts and aid; domestic and foreign procurement; the government budget; and the activities of parastatal bodies;
- (v) the mobilisation of substantial programme assistance to finance the import of:
 - vehicles, spares, and inputs for the cash crop programme;
 - a substantial volume of essential consumer goods until domestic industry finds its feet again;
 - inputs and spare parts for the industrial sector.

AGRICULTURE

AN OVERVIEW OF THE AGRICULTURAL SECTOR

D.G.R. Belshaw and W.R. Stent

BASIC CHARACTERISTICS AND ASSUMPTIONS

Agriculture looms large in Uganda both in terms of its place in the overall national economy and of its size relative to the other sectors. Since agriculture is the dominant source of livelihood and the rural areas are where the great majority of the population lives, the sector's features are stamped on many issues of policy-making and planning at the level of the national economy. The more general of these issues have been outlined in the preceding paper on the general economic situation in Uganda. They are

- the growing disparity between different districts in population pressure on the land;
- the fact that differences in the relative prosperity of the major agriculture products can cause politically sensitive imbalances in inter-regional income distribution;
- the primary importance of the small-scale or peasant mode of production both in terms of total output and, by implication, employment.

2. It is useful to mention at this point three more intimate aspects of the agricultural sector which fundamentally affect productivity and income distribution within it. These are

- the distribution of land ownership;
- the choice of production techniques;
- the operation of the inter-sectoral terms of trade.

3. Across half the area of Buganda Region a landlord and tenant system of tenure obtains. This 'mailo' system (so-called from the square mile unit of land measurement) has been substantially modified from the time of its introduction in 1900. Tenant rights have been protected so that rents are now entirely nominal, tenancies are heritable and dispossession is difficult and must be adequately compensated. Also, by the processes of sale and subdivision on inheritance the original 3 - 4,000 estates have been increased to a very much larger number, probably in the order of 200,000. The modal land holding therefore, whether tenant-held or freehold, now lies in the 2-4 ha. range. There are a relatively small number of larger holdings in the 10-40 ha. range which provide the opportunity for commercial farming. These have been influential in the past in providing the basis for dairy farming and sugar production on an outgrower basis linked to the sugar factories at Lugazi and Kakira.

4. Other factors have been more significant in the formation of large-scale agricultural units in the private sector. Excisions from public land were being made in the 1960s to enable influential individuals to own large estates. This process had been greatly accelerated under the Amin regime, so that large areas of fertile land suitable for high-value crop production are now enclosed, mainly for extensive beef ranches.^{1/} Also estates formerly owned by expatriates and Ugandan Asians were allocated after 1972 to

^{1/} The Ministry of Lands and Surveys declined to provide information on the size and location of land grants made under the Amin regime on the grounds that their records had been looted. It was not possible to verify this statement. Clearly, if it is true, it is essential that a new land register is compiled from district records or if necessary by a new survey which could be incorporated in either of the proposed national surveys of population (1980) or agriculture (1980/81).

parastatal corporations or again to influential individuals. Many of these estates have been abandoned in the last few months, so that a new set of decisions about their ownership and use must now be taken.

5. A major current feature of the agricultural sector is the scarcity of the labour supply and the associated increase in informal sector real wages in the rural areas. This is not fully revealed by rises in the rate per day or month as the size of the task also varies. In present circumstances, the standard task frequently requires only two-three hours to complete, so that labourers can work for several employers, or work the majority of the time on their own plots or engage in magendo trading and smuggling activities. The shortage of labour for crop and livestock production is caused primarily by the availability of these profitable alternative activities in the submerged informal sector of the economy.

6. An extension of this statement to neighbouring Rwanda in part explains the disappearance of the normal short-term migrant workers from that country and the return of permanently resident Banyarwanda workers, in some instances, to that country.^{1/} The increase in profitable opportunities for these people in Rwanda is explained by (i) the actions of leading figures in the military regime who established prosperous smuggling and commercial enterprises in that country, and (ii) other opportunities for trade with the south-western part of Uganda, given the unattractiveness of the official trade channels. As the borders become more tightly controlled and magendo activity in Uganda declines, the artificial boom in the Rwandan economy may be expected to subside and labour to return to seek work in Uganda.

7. One effect of all this has been that many estate managers found it profitable to apply herbicides - when they could be obtained. In other cases more long-term action has been taken; one state sugar firm has ordered four mechanical sugar harvesters from Australia, while other agriculturists are actively exploring the potential suitability of mechanical tea harvesters and cotton harvesters. In our view, this is to seek solutions to a short-term problem which will become increasingly inappropriate as the economy returns to normal. We have appraised the use of capital-intensive techniques in the reconstruction period in the expectation of a fairly rapid return to normal conditions of surplus labour (over-valued wage rates in the formal sector) and scarce foreign exchange (over-valued domestic currency). Consequently, agricultural mechanisation can be justified in those cases where it achieves substantial output gains and creates additional employment in ways that are not possible with less capital-intensive methods. At the same time, the fact that part of the unskilled labour force comes from Rwanda and, to a lesser extent, Zaire does provide a useful reserve of employment opportunities for Ugandans against the inevitable time when new land settlement is no longer an option.

8. It is also relevant to note that in the agricultural sector by far the greatest part of real capital formation has resulted from the transformation of natural resources, labour and indigenous management skills into such assets as cleared and/or drained land, planted perennial crops, food stores and traditional livestock of various kinds. Further scope exists for capital formation of this type on a widespread scale.

9. Some discussion is also required about the behaviour of the set of prices which together make up the sectoral terms of trade for agriculture. Given the widespread growth, under normal circumstances, of cash crops for export, the official rate of exchange is a crucial variable in the overall structure of incentives; it is on this, ultimately, that the price the producer receives for his export crop and the cost of his inputs and wage goods depends. These two items, however, do not balance out, so that a devaluation would generally be favourable to farmers, redistributing income to them and away from those whose expenditures are more dependent upon the import sector. Repeatedly, farmers and officials have emphasised to the team that producer prices are crucial in farmers' decision-making processes. It is upon these prices and the associated levels of output that the farmers' gross incomes depend and Ugandan farmers have shown that they quickly respond to these signals.

^{1/} An additional explanation was the decree of the military Government banning temporary migrants from working in Uganda. However, this was announced after the growth in international smuggling, and would not be capable of effective enforcement in any case.

10. Product prices in Uganda can also be affected by those paid in accessible markets in neighbouring countries. Uganda has long land and lake frontiers with Kenya, Tanzania, Rwanda, Zaire and the Sudan, where different pricing policies have been followed. The incentive at the border to sell goods outside the country has been strengthened through the de facto devaluation of the Uganda shilling on the currency black markets, largely reflecting the relative scarcity of consumer goods within Uganda. Farmers have not been slow to take advantage of the better terms of trade offered through these illicit markets.

11. Important, too, in the farmers' decision-making process is the cost of their inputs. Especially important is the cost of labour. Small-holders mostly employ their own household labour but there are times, such as at harvest, when they require additional labour. If a small-holder cannot afford to hire labour his output is reduced. The production of tea especially is very labour intensive and the inability of small-holders to pay labour more than the minimum rate has prevented them from obtaining an adequate labour force. As a result large areas of small-holder tea - estimated at 80 % of their planted area - has been neglected or abandoned altogether.

12. In Uganda, as elsewhere, wages are not determined by demand alone. Almost all Ugandans have access to land and they are therefore able to provide the means of their subsistence. If they are to enter the wage labour force they expect to be able to achieve a sufficient income to purchase an adequate supply not only of food but also of a few basic necessities such as soap, paraffin, some textiles and also, possibly a few 'luxuries'. The set of prices of such items relative to wage rates becomes, therefore, an important determinant of the supply of labour. If wages are not adequate to enable a labourer to purchase such items he may either not enter the cash sector at all, retreating to subsistence agriculture, or find employment where wages are more favourable.

13. Theoretically, if inputs, wage goods and services are to be allocated efficiently by the market mechanism, only one price, which should be known to all buyers and sellers, should prevail within any particular time period. It is possible to provide a justification for the coexistence of more than one price, but this requires that the market be capable of separation, on consistent grounds, into discrete, non-communicating, sectors. During the past five or six years, however, there have been simultaneously three prices for most goods. Consequently, marked shifts of production and employment have occurred within the agricultural sector. These changes are outlined in the following section. This analysis of the effects of changes in the terms of trade leads to an emphasis on the importance of restoring a normal incentive structure through appropriate pricing policies; this area is discussed in Paper 3.

14. Finally in this section, the nature of the specific approach adopted in these papers is compared with other feasible alternatives. We have based the recommended strategy for the rehabilitation of the agricultural sector almost entirely on the restoration of previously demonstrated production capacity, which can be rapidly activated through the provision of production, transport and processing inputs made available under foreign aid terms. Although the greater part of this productive capacity lies in the small-holder sub-sector, the fact that a process of restoration rather than development is entailed should enable the lengthy processes of adaptive research, pilot projects and painstaking appraisal of project benefits to be circumvented in this case. Large and speedy assistance is the essence of the reconstruction strategy, predicated on a high pay-off with low attendant uncertainty in these particular circumstances.

15. Our analysis has been oriented, therefore, to identifying commodity programmes and component projects which can be initiated by central government or parastatal agencies using public aid resources.

16. This leads necessarily to a centralist, top-down approach to agricultural planning ^{1/} and to a focus on productive efficiency rather than on distributive equity. Whilst we think that these emphases are appropriate to the task of restoring momentum to the overall economy, we would not wish to give the impression that this is an adequate or

^{1/} We tried to counter an excessively centralist viewpoint by visiting farms, estates and projects in 16 out of the 22 rural districts. Time and various military activities prevented the desirable total coverage from being achieved.

even desirable approach for the long-run development of the agricultural sector. Other planning procedures urgently need to be put in hand and decisions taken in key areas which are not discussed explicitly in this report.

17. In particular, only decentralised planning at the level of the local rural economy is able accurately to identify operational constraints on development, neglected potential and disadvantaged groups by-passed by the development process. Whilst broad inter-regional income disparities can be reduced by adjusting price relativities at the national level - in the manner employed in Papers 3 and 25 - an adequate approach to intra-rural equity and accelerated development also requires the supplementation of the present fragmented commodity-by-commodity approach by a multi-sectoral coordinated approach at the level of the local economy, and embracing the wider infrastructural considerations.

18. Fortunately, considerable experience with decentralised multi-sectoral planning has been gained over the past six years in Tanzania.^{1/} It would seem probable that some adaptation of the Tanzanian system would prove suitable and (given the smaller number of regions) even more workable in Uganda. Initially, we would suggest that the suitability of a three tier structure is examined with planning at the level of the region, the district and integrated rural development project areas below the district level. Such an approach would have implications for the distribution and number of, for example, agricultural extension and specialist field staff required. An early decision in this area is desirable, so that manpower planning and training decisions can be made which are consistent with it. We recommend that a planning mission be sent on a study tour of selected Tanzanian regions at the earliest opportunity.

19. Table 2.1 illustrates one aspect of this approach; an operational system would be elaborated in more detail at the level of multi-activity project areas within each zone. Not all agricultural production activities would combine at the farm system level. This applies particularly to livestock, where at the present stage of development an integrated approach is required more at the level of the local economy (including land-use alternatives, shared infrastructure, impact on employment and income distribution, etc.) than at the level of the farm unit.

20. A second urgent set of decisions for future agricultural development needs to be taken about the use of areas recently excised from the public domain and abandoned by their owners. Rather than proceeding automatically into a further round of 'allocations', we would urge that a perspective planning exercise is first conducted on the demand for land resources derived from population projections and consumption targets. Land excisions and the length of leasehold titles should be adjusted to match this perspective plan framework.

THE ROOTS OF THE CURRENT PROBLEMS

Effects of the Liberation War 1978/79

21. The most visible damage to the productive capacity of agriculture resulted from the effects of the liberation war; coffee factories and cotton ginneries have been damaged or destroyed. Almost all vehicles owned by cooperative unions, estates or government departments have been removed by one army or the other, and other machinery or spares were also widely stolen. The physical damage has been particularly severe in the case of the cooperative unions. The financial and other implications of this damage is discussed in the sections on robusta coffee, arabica coffee and cotton in Paper 4 below.

22. The less obvious but in some areas more serious consequences of the liberation war were the disruption caused to the planting programme. Cotton seed has not been dressed for planting, and, when dressed, it has not been distributed because of a general lack of transport. In Masaka, Acholi and West Nile Districts no cotton has yet been planted. Tobacco too would normally have been planted during the period when fighting was most intense. The time of planting is critical for both crops and it is likely that little will be harvested later in the year.

^{1/} Regional planning in Tanzania is the responsibility of the Prime Minister's Office which is located in Dodoma with a subsidiary office in Dar-es-Salaam.

Table 2.1

Production Components by Agro-Ecological Zone for the Agricultural Sector in Uganda

Agro-ecological Zones	Major Cash-earning Activities	Food Activities with good Cash-earning Potential	Subsistence Food Activities	Location by Administrative District
I. High effective rainfall, high altitudes	Arabica coffee Tea Pyrethrum Temperate fruits	European potatoes Temperate vegetables Dairy cattle Bananas	Sweet potatoes Wheat Peas	S. Kigezi W. Ankole Upper Rwenzori Toro Bugisu Sebei
II. High effective rainfall, middle altitudes	Robusta coffee Tea Spice crops Cocoa	Bananas Field beans Soya beans Dairy cattle Maize	Sweet potatoes	Masaka Mubende C. & S. Bunyoro E. Mengo) central W. Mengo) and south W. Busoga
III. Medium rainfall, middle altitudes	Cotton Tobacco Cashew Groundnuts Maize Sunflower	Sorghum Sim-sim Field beans Beef cattle Dairy cattle	Finger millet Cassava Cow-peas Goats	N. Kigezi Lower Rwenzori W. & E. Bunyoro N. Buganda Achoi, Lango, Teso, Bukedi, E. Busoga
IV. Lower rainfall, middle altitudes	Beef Cattle	Sorghum Goats	Cassava Pigeon peas	Karamoja N.E. Teso
V. Areas with high insolation, middle altitudes	Sugar Rice Tropical fruits High value vegetables	Dairy cattle Poultry Pigs		Central & northern areas

Effects of the Policies of the Military Regime, 1972-79

23. Some of the major cumulative effects of mismanagement and dishonesty by the Amin Government on the agricultural sector have been pointed out in Paper 1 on the general economic situation. The major consequences were

- the drastic decline in recorded production of the major agricultural export crops between 1970 and 1978;
- a particularly marked decline in productive capacity in the capital-intensive estate sub-sector;
- the overwhelming, and increasing, dependence upon coffee for Uganda's foreign exchange earnings;
- the smuggling of large quantities of primary produce, especially coffee, across Uganda's international borders;
- the switch of agricultural resources from cash crops into food surpluses in areas with access to urban markets;
- intensified problems of low income in some of the remoter districts;
- the unsupportable debt burden placed on many of the key cooperative marketing unions through rising costs and falling throughputs of primary products.

24. Certain of these aspects justify fuller discussion here. The fact that three sets of prices obtained for many agricultural products or wage goods over long periods was mentioned above. Official or controlled prices were specified by Government for many commodities, especially basic items such as sugar, soap, cigarettes and beer, and also for the various inputs of the productive process, such as tools, fuel and labour. In addition the prices of imported goods, for those who had access to foreign currency at the official rate, were determined by the official exchange rate. A second series of prices may be termed 'army prices'. These were invariably less than the official prices. When goods were confiscated, the price was zero and at other times, such as when goods were sold at the local market at gunpoint, the price was much less than otherwise would have been the case. A third series of prices existed on the magendo market. This market operated for almost the entire range of commodities. These prices were determined by supply and demand. This included the supply and demand from neighbouring countries, given the open nature of the land and lake borders and their deliberate breaching by influential Ugandans in or close to the military leadership in Government.

25. The prevalence of the magendo market enabled some groups of individuals, and especially members of the army and their friends, to make enormous profits, whilst those who did not have access to the limited supplies of consumer goods at controlled prices had to pay high prices even for necessities. Because wages were fixed many Uganda wage-earners were forced to enter the magendo market to supplement their income, others left wage employment to devote their entire time to magendo. As inflation continued, more time was diverted to magendo, not only by labourers but also by all levels of employees. A particularly important form, as far as agriculture was concerned, was smuggling. Large quantities of coffee (up to 50,000 or even 60,000 tonnes a year has been estimated) and some cotton and livestock, were taken illegally across the borders of Uganda to countries where prices were far higher. Such smuggling was by no means on a small scale - individuals who had good contacts were able to obtain an army escort for trucks and trailers as they crossed into Kenya. Indeed, it has been suggested that 75% of the volume of smuggling in the more recent years was carried on at that scale.

26. Various forms of financial mismanagement in cooperative unions or marketing boards resulted in farmers receiving payment for their products long after they delivered them. This was especially so in the case of cotton and tea, payment for which was, in some cases, delayed for up to 12 months. A principal reason was the failure to ensure that sufficiently large crop purchasing funds reached the primary societies. One cause was the slow transport of produce, especially tea and coffee, from the unions to the marketing boards. In the case of lint, however, this becomes the property of the Lint Marketing Board as soon as it is ginned but, even so, the Board often failed to pay the

ginneries within a reasonable period. When credits finally arrived, unions often found it necessary to use a large proportion to pay their wage and salary bills. Thus funds which would otherwise have been available for the purchase of farmers' production were depleted, and as a consequence the primary societies often found themselves with less cash than was required to purchase stocks sufficient to fill their available storage space. In such cases they often took delivery on credit even though it was illegal to do so.

27. Whilst official prices remained fairly constant throughout the period of the 'economic war', prices for uncontrolled items, especially of locally produced foodstuffs such as bananas, groundnuts and simsim, soared in response to the magendo prices of salt, sugar, paraffin and other basic commodities. Farmers who had the opportunity to take advantage of the higher prices were quick to transfer their resources into the production of the more profitable crops. Others, less happily placed geographically, retreated into self-sufficient subsistence.

THE TASK AHEAD

28. The overall objective of any reconstruction and rehabilitation proposals for the agricultural sector must be to restore overall levels of productivity per capita to the 1970 levels as rapidly as possible. The major foreign exchange earners - coffee, tea and cotton - and the import-savers - sugar, tobacco and livestock products - require rapid disbursement of financial aid and technical assistance to support well-designed projects. Other assistance is required for the crucial supporting infrastructure - in transport, processing, extension, credit, agriculture, planning and statistics, etc. Other minor projects with development potential and the research network require some assistance - if only at a care and maintenance level - to prevent further deterioration and the loss of valuable infrastructure or information.

29. Table 2.2 shows the peak levels of production of the major agricultural products. It also lists the estimated costs of the two year rehabilitation programmes we have proposed. These expenditures together with appropriate policy measures are deemed to be adequate to restore production to the peak levels. It can be seen that the pay-offs in terms of net social benefits will be considerable.

30. Aid alone will not be sufficient to achieve the goal identified above. The operating environment within which agricultural production and marketing activities occur needs systematic reform. Of primary concern is an improvement in the sectoral terms of trade facing the agricultural sector. This reflects the component set of product prices, input prices (including wage rates) and wage goods prices. These in turn reflect fiscal policy, exchange rate policy and transport and processing costs amongst others. The complex set of simultaneous actions required to reverse the mutually reinforcing distortions of the past eight years have been brought together in the main report. In the realm of agricultural policy in the narrow sense, emphasis is placed on revising product prices - including both their relationship to export or import parity levels and the relationship between prices themselves as they affect inter-regional income distribution within the country. Other crucial areas relate to the financial structure of the cooperative movement and the performance and control of the statutory marketing boards.

31. In initiating a return to the productivity levels of 1970, we are not advocating the reproduction of the precise pattern of productivity or institutional framework found at that date. Some gains have been made, especially in the smallholder or informal sectors. An expanded capability in small scale production of jaggery, which could be converted to the production of sugar, has been created. Backyard and village level skills in implement repair and manufacture has been established or re-established. The urban milk supply is now obtained by reconstituting low-priced dried skimmed milk, which offers the eventual possibility of the cheap supply of a nutritious foodstuff to lower-income urban residents. These gains should not be destroyed in a blind rush backwards to 1970. It will be particularly important, however, to restore previous planning capacity and its reliable data base so that both the growth and distributional consequences of the rehabilitation programmes - and of further exogenous changes - can be carefully monitored, and appropriate adjustments or new policies or projects be introduced as speedily as possible.

Table 2.2

Returns to Restoring Peak Production Levels of Major Agricultural Products

CROP	Peak output		Current output		Gap	1979 Value Shs.m.	Additional produc- tion inputs required to achieve peak production 1979/80 and 1980/81 Shs.m.	Ratio (vii) : (vi)
	Year	'000 tonnes	'000 tonnes	Value Shs.m.	'000 tonnes			
	(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)	
Coffee	1969	251.	180.	5100.0	71.	1991.6	349.7 [*]	0.18
Tea	1972	21.	11.	82.5	10.	201.0 ⁺	282.1	1.40
Cotton (^{'000} bales)	1970	467.	60.	128.0	407.	870.0	370.9 [*]	0.43
Sugar	1970	144.	20.	39.0	124.	241.8	160.0	0.66
Tobacco	1972	5.0	1.5	22.5	3.5	52.5	88.4	1.68

^{*} 21,000 tonnes Shs. 13.50 per kg. made tea less 11,000 tonnes at 7.50 per kg.

⁺ Includes restoration of war damage and costs of the ginnery rehabilitation project.

SUMMARY OF RECOMMENDATIONS

Policies

32. One essential component without which the goals of the rehabilitation programme for agriculture cannot be achieved is a substantive increase in the producer prices of the major cash crops - coffee, tea, cotton and tobacco. Ugandan farmers have shown themselves to be very responsive to changes in relative prices and there can be no doubt that increasing their real returns from export crops will rapidly lead to an increase in export earnings. Especially important in this regard is the coffee price; at its present level a large proportion of the crop is likely to be smuggled out of the country. Tea exports could, within six months, also respond to an increase in producer prices. Cotton exports will take longer to recover but it is essential that increases in the prices paid both to the ginneries and the farmers be announced by the end of 1979, if output is to rise from the 1980 planted crop onwards. Our recommendations are presented in more detail in Paper 3.

33. We also recommend that resources are secured for the cooperative marketing unions to provide crop finance, restitution of major war damage, especially to key plant and vehicles, and to postpone (at least) the repayment of the burden of debt inherited in large part from the general economic mismanagement of the military regime. This also is discussed in greater detail in Paper 3.

34. Other considerations in a farmer's decision to plant a particular crop are the costs of his inputs and wage goods. In the case of Ugandan farmers, the prices of the physical inputs - chemicals, seed and tools - are particularly relevant, and some of these should be subsidised (see the product papers). But even more important are the prices of various consumer goods. We strongly support the recommendations made elsewhere in the Team's report to reduce the prices paid for these by all consumers, which will also serve to improve farmers' terms of trade. In most cases this requires that supplies be increased so that magendo prices will no longer apply. Adequate transport for the distribution of consumer goods into rural areas is also an integral part of this package.

35. The efficient and honest administration of the major produce marketing boards is an essential element in the restoration of the agricultural sector. We have made four specific sets of recommendations in this area:

- (i) The affairs of the Coffee Marketing Board be subject to an official committee of enquiry and its management and policy-making structure reconstructed (Paper 4);
- (ii) The Uganda Tea Authority be reconstituted with streamlined responsibilities as the Uganda Tea Board (Paper 4);
- (iii) The Dairy Corporation continue to concentrate its activities on the manufacture and sale of reconstituted milk rather than moving back into the collection and processing of whole milk supplies from the rural areas (Paper 5);
- (iv) The produce buying activities of the Produce Marketing Board be suspended (as they have been in practice), the Board be wound up and its processing companies be disposed of to another parastatal or to a private firm (Paper 6).

36. Agricultural mechanisation policy should concentrate on:

- the supply of adequate quantities of cheap and reliable hand equipment;
- the supply of an increased quantity and range of animal-powered implements (including the establishment of additional domestic manufacturing capacity);

- training mechanics and technicians in the maintenance and repair of agricultural processing equipment i.e. coffee hullers, tea making machinery, cotton gins and presses, sugar mill equipment, etc;
- restricting tractor cultivation to the few areas where alternative techniques are not feasible or have not yet been developed i.e. sugar cultivation and harvesting and tobacco cultivation;
- scaling-down bush clearing capacity to one reduced unit to be shared by the Ministries of Agriculture and Animal Resources.

Projects

37. We have recommended a rehabilitation programme for both robusta and arabica coffee. The former involves two projects, one aimed at demonstrating improved agro-nomic practices and the other at the provision of chemical inputs to farmers. The arabica programme is based on projects aimed at the rehabilitation of its production in both Bugisu and the Western Region. An additional project is aimed at the control of coffee berry disease. We have estimated the cost of this programme to be Shs. 117.6 m. in 1979/80 and Shs. 89.1 m. in 1980/81.

38. The rehabilitation programme for tea is aimed at bringing back into production the large areas of tea which have been abandoned. It consists primarily of the provision of fertiliser and the improvement of transport for the movement of green leaf to the factories, the repair and maintenance of existing factories and the completion of three factories for the processing of small-holders' tea. We estimate that the programme will cost Shs. 149.3 m. in 1979/80 and Shs. 132.8 m. in 1980/81.

39. Our programme for cotton is aimed at restoring output to 1970 levels. Fundamental to this is an improvement in the provision of extension services and the provision of chemical inputs to the farmers. This requires an improvement in transport facilities and also the provision of equipment and chemicals for extension workers. Chemicals and equipment will also need to be made available to farmers. We recommend, too, that ginneries be supplied with adequate transport and that their machinery be repaired. This requires the provision of spare parts. The ginnery rehabilitation programme will need to be completed within three years if the ginneries are to cope with production in excess of 450,000 bales. The estimated cost of our recommendations is Shs. 31.9 m. in 1979/80 and Shs. 59 m. in 1980/81.

40. The rehabilitation of the sugar industry poses special problems. Much money spent on the industry has, in the past, been wasted. Accordingly, we recommend that a careful appraisal of the three production units be made before any significant expenditure on development plans is commenced. We have included in the Summary Table estimates for necessary spare parts and maintenance of the sugar industry, but not for any development of it, which should await consultants' reports.

41. The tobacco programme is aimed at the reconstruction of tobacco farms and wood fuel plantations for the flue-cured crop. We recommend that tractors be made available for transport and the opening up of land for tobacco and that in 1980/81 a start be made on the establishment of a Tobacco Research Centre. We estimate that the programme will cost Shs. 52.4 m. in 1979/80 and Shs. 34.0 m. in 1980/81.

42. Food crop production has been restricted by the lack of tools and improved seed. We recommend that these be imported. We also recommend that steps be taken to set up an early warning system to monitor the adequacy of potential food-deficit areas to provide their food requirements. The cost of our recommendations will be Shs. 151.7 m. in 1979/80 and Shs. 113.7 m. in 1980/81.

43. Several special projects for the production of vegetable seed, citrus, cashew nuts, etc. have been brought to our attention. We recommend that they should proceed and will cost Shs. 5.3 m. in 1979/80 and Shs. 10.5 m. in 1980/81.

44. Our programme for the rehabilitation of the livestock industry is aimed at increasing the supply of meat and milk. We recommend that the National Dairy Corporation divest itself of all involvement in fresh whole milk and that it repasturise milk from imported dry skim milk and vegetable oils. We recommend, too, that animal health be improved through the mobilisation of veterinarians and the provision of the necessary drugs and vaccines and the rehabilitation of dips. We recommend also that four veterinary diagnostic laboratories be established. Breeding stock will need to be improved for the Ministry of Animal Resources' Poultry Breeding Unit. We recommend also that two bulls be imported and that an Artificial Insemination Scheme be re-established. We also recommend that a number of pigs be imported for breeding purposes. Other recommendations are that fresh whole milk be sold on the free market and that extension to dairy farmers be increased. We recommend that, with this end in view, Njeru Dairy Farm be rehabilitated and further developed. We estimate that the cost of our programme will be Shs. 143.4 m. in 1979/80 and Shs. 179.2 m. in 1980/81.

45. We recommend that the low cost farm implements factory, together with the cultivation demonstration unit be rehabilitated. This will cost Shs. 1.7 m. in 1979/80 and Shs. 6.4 m. in 1980/81.

46. The rehabilitation of the Ministry of Agriculture requires expenditure not only on physical facilities but also on agricultural education which is provided at various levels from schools and district farm institutes to Makerere University. We recommend that expenditure in all these areas be increased. The total cost of this, together with the rehabilitation of the Ministry's own extension, planning and research facilities will cost Shs. 90.9 m. in 1979/80 and Shs. 64.7 m. in 1980/81.

47. Details of our recommended programme are given in Table 2.3. In summary, it involves the expenditure of Shs. 824.2 m. in 1979/80 and Shs. 765.4 m. in 1980/81.

Table 2.3

Summary of Recurrent and Capital Costs of Agricultural Rehabilitation Programme 1979/80

	1979/80			1980/81		
	Recurrent		Capital	Recurrent		Capital
	F E	Total		F E	Total	
Coffee	55.1	55.1	0.3	55.1	55.1	34.0
Tea	29.5	31.1	21.7	29.5	31.1	101.7
Cotton	11.4	13.4	2.0	39.3	43.0	14.0
Sugar	-	20.0	10.0	-	20.0	50.0
Tobacco	8.5	13.4	6.0	10.5	17.0	16.5
Foodstuffs	-	9.5	32.7	-	9.5	72.2
Special Projects	0.3	0.3	0.7	-	-	9.1
Livestock	114.1	129.5	0.5	20.7	154.5	18.2
Small Industries	0.2	0.3	-	1.7	2.0	4.4
Research, Extension, Planning	2.5	7.4	27.9	5.3	14.3	34.9
TOTALS	221.6	280.0	101.8	162.1	346.5	355.0
						418.9

POLICIES FOR AGRICULTURAL REHABILITATION

D.G.R. Belshaw and W.R. Stent

Pricing Policy

Erroneous product pricing can be identified as the one single major cause of the problems confronting the new Government in the agricultural sector. Serious damage to the national economy has occurred in three major crops: (i) the widespread practice of coffee smuggling, probably running at 25-35% of the total crop; (ii) the decline in tea production by over half the peak production and probably 40% below the normal price per unit because of poor quality; (iii) the decline in cotton production to less than one-seventh of the peak level achieved in 1970 - i.e. the 'normal' year we have chosen as a baseline for this report. Due primarily to a shift in the structure of relative prices, productive resources have been switched into increasing the output of uncontrolled food crops, into brewing and distilling activities of the informal sector type, and into labour-intensive magendo trading and smuggling activities. Careful and detailed attention, therefore, must be paid to this policy area in planning for the two-year reconstruction period.

2. The main concerns of agricultural pricing policy are with (i) the administered producer prices for the three major export crops - coffee, cotton and tea; and (ii) the relationships between these prices on the one hand and their international export values, the prices of other, large uncontrolled crops, the wage rate and the cost of the basket of consumer goods purchased by cash-crop producers on the other hand. Three national policy objectives are identified which relate to this policy area:

- To internalise and move into official marketing channels all primary produce currently being smuggled across Uganda's borders i.e. coffee primarily but also cotton and cattle;
- To provide relative price incentives for: the rehabilitation of socially productive agricultural assets currently abandoned i.e. tea (11,000 ha), sugar (25,000 ha) and coffee (a large but unknown area);
the movement of underutilised low cost resources into crop production;
the adoption of socially profitable innovations in export crop production e.g. coffee - new varieties and fertiliser application;
- To achieve a significant improvement in production incentives for all major rural communities in order not to exacerbate inter-regional tensions arising from different levels of development.

3. There are, potentially, a large number of policy instruments which can be applied singly or in combination to achieve one or more of the policy objectives. These are:

- a) Improving official producer prices i.e. de facto minimum prices;
- b) Reducing export taxes on export crops (coffee only);
- c) Reducing marketing costs, increasing efficiency and reducing losses in the statutory boards and other marketing bodies;
- d) Direct subsidy of the producer price;
- e) Devaluation of the domestic currency;
- f) Subsidies for key production inputs;
- g) Increasing the supply of consumer goods by accelerating domestic industrial production;
- h) Increasing the supply of consumer goods by accelerated direct importation;

- i) Reducing/waiving import duties on selected imports.
- j) Other changes in fiscal policy which improve agricultural producers' terms of trade, such as reducing sales tax on mass consumption items.

4. To the extent that instruments (f) and (g) reduce the ruling price of consumer goods, the producers' terms of trade are improved, hired labour costs fall and the border smuggling incentives reduced. But measures (b) to (e) will raise the internal money supply and thereby increase inflationary pressures. Measure (e) also raises the Uganda shilling price of imports for measures (g) and (h) unless it can be offset by (i).

5. This suggests the need for phasing in the set of adjusted prices in two or three stages. Coffee and tea prices can be altered at least twice a year without major problems. The cotton price should be changed only once, before the planting season begins (it should be announced by the end of March at the very latest). The cotton producers' purchasing power is not increased until 10-12 months after a price increase is announced, whereas tea and coffee producers' incomes are increased immediately.

6. Measure (d) can realistically be financed only by inter-product transfer payments i.e. by coffee revenue subsidising tea and cotton prices. This would help achieve objective (c), but it would cause such a visible inter-regional flow of funds that it would probably create more social tension than it would alleviate, and in any case would provide the regionalist element in the country with a large bone to chew on. It is therefore not recommended as a suitable measure.

7. We now turn to a more detailed analysis of the issues relevant to price determination for each crop.

(a) Coffee

The Kenya border has the strongest incentives for smuggling because of the following factors:

- the availability and low price of consumer goods;
- the high prices paid to Kenya coffee producers;
- the transport cost advantage compared to coffee sales to Tanzania, Rwanda or Zaire;
- a large part of the frontier is open i.e. over the top of Mt. Elgen and numerous tracks and paths between Malaba and Busia;
- Bugisu arabica coffee is very similar to the coffee grown in Bungoma and Trans-Nzoia districts of Kenya;
- the illicit coffee trade in Kenya is well-organised, financed and had influential support at high levels.

8. In 1978 Kenya producers were receiving around K.Shs. 12 per kg. green beans or nearly K.Shs. 10 per kg. parchment. The border currency exchange rate appears to have risen recently from U.Shs.100: K.Shs.10 to between U.Shs.100: K.Shs.20. Taking the better rate, this suggests a price 'in Kenya trade' of U.Shs.50 per kg. parchment. Guessing at the Kenya/Uganda split of the 'illicit' margin and allowing for some further improvement in the exchange rate, the farm gate price in Bugisu might be somewhere in the U.Shs. 15-20 range i.e. 2-2½ times the official 1978/79 Grade 1 parchment price of U.Shs. 7.70 per kg.

9. For the moment a similar increase is assumed to be desirable for the robusta prices, with stronger expectations about the increases in output to be obtained from bringing back abandoned areas of coffee. Measure (g) may also be useful in this respect, especially subsidised supplies of dalapon for couch grass eradication in the early phases of reconstruction.

10. Adjusting the robusta price from U.Shs. 3.50 kg. Kiboko by 2-2½ times suggests a range of U.Shs. 7 - 8.75. Using a 1979/80 price estimate of US\$1.70 per lb. clean

coffee f.o.b. Mombasa (which is clearly a cautious¹ estimate), this converts to U.Shs. 15.71 per kg. kiboko at the current exchange rate.² This would reduce the export tax yield to Shs. 6.81 and still leave a sufficient margin for union and board processing and transport costs (estimated at 12% or Shs. 1.90 per kg. clean coffee). One may conclude that a significant increase in the coffee producer price is possible i.e. of the order of 100% or more as necessary to control smuggling, whilst still leaving a significant proportion of the international price in the hands of the Treasury as export duty.

(b) Cotton

11. The current Uganda price is Shs. 5.00 per kg. clean seed cotton ('safi'). The corresponding price in Kenya is K.Shs. 3.45 per kg. although they pay a higher price for stained seed cotton ('fifi') - K.Shs. 1.70 as against U.Shs. 1.00. The current Uganda price is expected to require a subsidy of Shs. 82.5m on a 1979/80 crop estimated at 70,000 bales.³ This is a subsidy of over Shs. 6 per kg. of lint (around Shs. 2.10 per kg. of seed cotton). As is pointed out in Paper 4, the lower Kenya price remains more attractive to Uganda growers given the current (and expected 1979) disparities in currency purchasing power. Nevertheless, one would expect that the smuggling radius of cotton, given its bulky nature, is less than for coffee, so that foreign exchange losses to the Ugandan economy in 1979 will be lessened by the small size of the crop in the border areas and its relatively low price compared with coffee.

12. The cotton export tax has been waived since 1977. The problem is that the maintenance of the current producer price already required a direct subsidy; clearly any further increase in price by this means will face strongly rising opportunity costs and vested interest opposition from elsewhere in the public sector.

(c) Tea

13. No smuggling of tea has been reported. Some 11,000 ha. out of 21,000 ha. of tea bushes, however - most of them planted within the last 12 years - have been abandoned since 1975. Over half the tea area has been planted by small-holders who receive a price for their green-leaf from the factory where it is processed; 80% of this small-holder area is reported to be abandoned. In 1978, Uganda was averaging U.Shs. 7.47 per kg. of made tea in the Nairobi auctions, compared with K.Shs. 13.44 per kg. received by Kenya teas. This quality differential reflected problems of labour shortage and management in Ugandan tea areas. In normal circumstances, Ugandan teas fetch only a small margin below Kenyan teas. At present, the small-holder is paid a green leaf price of Shs.1.35 per kg.⁴ This is equivalent to Shs. \$.75 per kg. of made tea. Given large additional costs of processing, transport, loan repayment and heavy overhead administrative costs, amounting to some U.Shs. 6.50 per kg. of made tea, the green leaf price had to be subsidised by Shs. 15m. in 1978⁵. As with cotton, therefore, subsidies are already required to maintain the producer price.

14. We now need to identify the desirable relationship between the three product prices. Currently, tea is not profitable for a large part of the industry, while cotton requires a subsidy to maintain the current price. Coffee, on the other hand, receives a low official price relative to that obtainable via illicit sales to neighbouring countries. Market prospects for coffee appear strong over the next few years.

¹ If the world price rises significantly above this level it will be necessary to raise the producer price by a larger amount, as the price paid to Kenya producers will rise also i.e. the objective is to keep Uganda prices within sufficient distance of Kenya prices to discourage large-scale smuggling.

² Clean coffee out-turn from kiboko averages around 56%.

³ This Ministry of Cooperatives and Marketing estimate is more optimistic than 50,000 bales of the LMB.

⁴ Raised from Shs. 0.88 per kg. in 1976, a price which had remained constant since 1967.

⁵ This was equivalent to approximately Shs.1.25 per kg. green leaf. In addition, loan repayments were not made.

The short-run price policy objectives can be defined as follows:

- to find the minimum price sufficient to return most if not all the tea assets to profitable employment;
- to find the minimum price necessary to bring most, if not all, of Uganda's coffee back into official marketing channels;
- to maintain tea and cotton profitability without recourse to direct subsidies of the producer price;
- to dampen the transmission of those extremes of international commodity price movements which would cause unacceptably strong differences in regional income levels.

15. The solutions to these objectives can best be found by a process of successive approximation. Data are too inadequate in several areas - supply responses, market price trends, etc. - to allow the employment of any kind of optimising model. The quantified scenarios which follow here and in Paper 25, where national level financial policy is discussed, are intended primarily to illustrate a planning approach, although the values chosen are intended to be as realistic as present information allows.

16. Table 3.1 sets out to arrive at approximate price levels which would satisfy the planning objectives. The methodology used is to identify, with the help of representative farm production input-output data, the price relativities between coffee on the one hand and tea and cotton on the other which will permit a spread of comparable farm cash incomes - or at least the opportunity to earn such incomes - across the major part of the rural population.

17. The effect of variation in costs of purchased inputs is not expected to differ very widely between the three enterprises at the level of management assumed. Minimal levels of fertiliser application and insecticide (for cotton and coffee only) are necessary to achieve the assumed yields.

18. To summarise the results, the coffee price has been set exogenously at the minimum level judged necessary to minimise smuggling activities i.e. Shs. 7.00 per kg. kiboko or twice the current level, with a similar proportional increase for arabica parchment. Relative income considerations then suggest target prices of at least Shs. 6.00 per kg. of clean seed cotton ('safi') and Shs. 2.00 per kg. of green leaf for tea out-growers, and higher prices proportionally if it is necessary to further raise the coffee price to counter smuggling.

19. The next step in the analysis is to explore the impact of the policy instruments available for achieving the desired price relativities, especially various levels of external devaluation. Discussion of these issues is found in Paper 25.

Marketing Policies

20. We have emphasised the importance of the fact that the great majority of Ugandan farmers are very responsive to the relative prices prevailing in the rural areas. These are dependent upon a range of factors including world market prices and government policies with respect to exchange rates, subsidies and export taxes. They are also dependent upon the efficiency of the agricultural marketing organisations of Uganda. Both the marketing boards and the cooperative movement play a crucial role in marketing. The entire cotton crop is processed and marketed through cooperatives and they also handle the major part of the coffee crop. They deal too with smaller proportions of many other crops. The marketing boards have statutory monopoly rights over the sale of the major export crops. The structure of marketing for agricultural products in Uganda is summarised in Table 3.2.

21. It is clear from this table that although there is a long history of intervention by successive governments in the arrangements for agricultural marketing, no uniform structure has been imposed. The arrangements for each commodity may be viewed as the outcome of the specific array of private interest groups, technical factors and the policy preferences of government agencies at the material time when decisions were being made. In general, and in contrast to most neighbouring countries, the role of producers in the policy-determining fora of statutory bodies is insignificantly developed. The more urgent cases where structural reform appears desirable are discussed in the context of the individual commodities elsewhere in this report.

Table 3.1

Producer Prices and Incomes for Family Farm Enterprises with Average Management :
Coffee, Cotton and Tea

	'Average Management' Yields		Man-days/Acre	Average Family Workload (acres) (Additional to Food Crops)		Total Man-days Per Annum
(a) Basic Farm Management Data	Coffee	500 lbs. Kiboko/ac.	60	3½ ¹		210
	Cotton	500 lbs. seed cotton/ac.	120	1½		225
	Tea	1000 kgs. made tea/ha.	200	1¼		250
(b) Target Prices and Incomes		Yield/ha (kgs)	Farm Output (kgs)	Target Prices		Gross Revenue(Shs)
	Coffee	312	1092	7/00		7644
	Cotton	445	813	6/00		4878
	Tea	5000	2500	2/00		5000
(c) Current Prices and Incomes		Yield/ha (kgs)	Farm Output (kgs)	Current Prices		Gross Revenue(Shs)
	Coffee	312	1092	(3/50) ²		(3822) ²
	Cotton	445	813	5/00		4065
	Tea	5000	2500	1/35		3375

¹For many farmers in the coffee areas, land will become limiting before this limit is reached.

²The official price has been paid on only two-thirds of the crop in recent years; higher prices were paid for the remainder which has been smuggled.

Source: Commonwealth Team

22. The basic unit of organisation of the cooperatives is the primary society. This may be formed by any group of ten or more persons with a common purpose, economic or social. Primary societies join together to form unions and it is at this level that the ginning of cotton and the processing of coffee usually takes place. The unions have also combined to form six national unions to provide specialised services. These include the supply of coffee factory and ginnery spares, publicity and transport. The Uganda Cooperative Bank and the Uganda Cooperative Credit and Savings Union are also national unions of this kind.

Table 3.2
Marketing Structures for the Major Agricultural
Sector Products: Uganda 1979

Product (1)	Sub-sector (2)	Market Structure (3)	Production/ Marketing Chain (4)	Marketing Parastatal or Board (5)	Responsible Ministry (6)
1. Coffee	Private Sector	Free market under CMB buying price	Estate factories Estate pulperies	CMB	MCM
	Cooperative sector	Administered processing formula and min. producer price	Societies→ Union factories	CMB	MCM
2. Cotton	Cooperative monopoly	Administered processing formula and fixed producer price	Societies→ Union ginneries	LMB	MCM
3. Tea	Small scale	State administered green leaf price	(Cooperatives) UTGC	UTA/BUL	MA
	Large scale	Free market	AEL UTGC UTA Private firms	UTA/BUL	MA
4. Sugar	Small scale	(Cane prices negotiated with factories)			MCI
	Large scale	(Statutory retail prices)	NSW KSW USF (SBE)	-	MCI
5. Jaggery	Licensed producers	Free market	Producers→ traders/spirit processors	-	MCI
6. Tobacco	Cooperative monopolies	(Statutory retail prices) producer price formula & quotas	Barns→ Societies→ Unions	NTC	MCI
7. Other crops	All producers	Free market (with statutory minimum producer prices)	Producers→ traders→ retail	(PMB)	MCM
8. Beef	All producers	Free market (with statutory maximum retail prices)	Private, co-operatives, state, parastatal herds	-	MAR

Product	Sub-sector	Market Structure	Production/Marketing Chain	Marketing Parastatal or Board	Responsible Ministry
(1)	(2)	(3)	(4)	(5)	(6)
9. Milk	Rural supplies	Free market (with statutory maximum retail prices)	Producer/retailers or traders	-	MAR
	Urban supplies	(Statutory monopoly)	Producers	(DC)	MAR

Abbreviations:

Column 4 : UTGC - Uganda Tea Growers Corporation
 AEL - Agricultural Enterprises Limited
 UTA - Uganda Tea Authority
 NSW - National Sugar Works (Kinyala)
 USF - Uganda Sugar Factory (Lugazi)
 KSW - Kakira Sugar Works
 SBE - Sango Bay Estates

Column 5 : CMB - Coffee Marketing Board
 LMB - Lint Marketing Board
 UTA - Uganda Tea Authority
 BUL - Blenders Uganda Limited
 NTC - National Tobacco Corporation
 PMB - Produce Marketing Board
 DC - Dairy Corporation

Column 6 : MA - Ministry of Agriculture
 MCI - Ministry of Commerce and Industry
 MCM - Ministry of Cooperatives and Marketing
 MAR - Ministry of Animal Resources

Note: Brackets indicate that the organisation or structural component was not operationally effective as at June 1979.

Source: Commonwealth Team

23. The cooperatives movement was able to expand throughout the period from 1972 to 1978, by which time there was 3,054 primary societies and 41 unions with a total membership of 1.1m. In that year they operated 54 ginneries and 51 coffee factories. However, despite its expansion, the movement operated under considerable difficulties. Sales of all crops through the cooperatives fell and the overhead costs of operating ginneries and coffee factories rose. Spare parts for these and for vehicles, became difficult, and often impossible, to obtain, and agricultural inputs became scarce. The cooperatives were required by law to purchase, at official prices, all coffee and cotton offered to them; these they sold to the Coffee and Lint Marketing Boards. In the case of cotton the prices received by the unions were lower than their ginning costs. As a result the cotton unions sank deeper into debt. By the end of 1978 bank overdrafts to unions had increased to the region of Shs. 200m. In addition to this the unions usually require an annual advance of a similar amount for crop purchases.

24. It would, however, be incorrect to give the impression that their poor current financial situation is entirely due to past government policies. Many unions have been subject to poor management which appears to have often been more concerned for the welfare of the cooperatives' employees than for that of its producer members. In particular there has been a tendency to diversify activities into areas which can bring only peripheral benefits, if any, to the members. Thus, producer unions are now found to be operating, amongst other activities, ranches, pineapple plantations, various seedmills, bookshops, hotels, rented properties, primary and commercial schools, consumer goods stores, engineering works, petrol stations and dispensaries.

25. The financial position of the cotton unions has also been adversely affected by the Amin Government's ginnery rehabilitation scheme which involved total expenditure in excess of Shs. 100m. The scheme commenced at the beginning of 1978 even though at that time cotton production was falling and the capacity of the existing ginneries was more than adequate for the crop. The ginneries did not need total rehabilitation so much as the provision of spare parts. As it is, all the machinery has been purchased but none of the rehabilitated ginneries is fully operational. Delays in construction have been due to building material shortages at a national level, but even so eventually the cost of these delays will have to be borne by the unions owning the ginneries.

26. The precarious financial position of the unions has been worsened as a result of the liberation war. In some cases factories and ginneries were totally destroyed, vehicles stolen and stores looted. Details of these as they apply to particular crop processing and marketing facilities are provided in Paper 4.

27. The restoration of the cooperatives structure to efficient operation and financial solvency requires, firstly, that their throughput of agricultural produce be considerably increased. We have proposed elsewhere policies which we believe will achieve this aim. In addition, adequate crop finance must be allocated to the unions so that farmers can be paid cash on delivery of their produce. The unions' road transport capacity must also be restored so that produce can be quickly removed from the primary societies to the processing plants and thence to the respective marketing board's plant or godowns. To ensure that these operations are carried out, in many cases it will be necessary to lift at least part of the heavy burden of union indebtedness. This is discussed in Paper 26. Effective measures will also be required to overcome much of the physical damage suffered by the cooperatives as a result of the liberation war.

28. Many cooperatives are diversified into areas which are unprofitable and not in the best interests of their producer members. These assets should be disposed of.

29. It has not been possible to obtain an accurate estimate of the total funding requirements of the cooperative movement but Table 3.3 summarises our best estimates of these needs. We recommend that the total needs - say Shs. 1100m. - be drawn to the attention of the international cooperative movement.

Table 3.3
Funding Requirements of the Uganda Cooperative Unions

	Shs. m
1. <u>Crop Finance</u>	
Cotton)	
Coffee)	500.0
2. <u>War Damage</u>	
Robusta coffee	140.8
Arabica coffee	1.8
Cotton	80.0
3. <u>Indebtedness</u>	
Bank overdrafts	200.0
Ginnery rehabilitation	120.0
4. <u>Committed expenditure</u>	
Completion of ginnery rehabilitation	80.0
TOTAL	1,122.6

30. The operations of the marketing boards, no doubt, could be more efficiently undertaken. Paper 4 makes special reference to the inadequate accounting practices of the Coffee Marketing Board. In Paper 6 we have suggested that the Produce Marketing Board could well be wound up. In general, it is important that producers' interests be more adequately represented at board of directors level in all the marketing boards. We recommend that steps be taken to reconstitute the board membership, and where necessary reform the constitution of the statutory marketing boards themselves, in order to remove the risks and burdens which the recent system of bureaucratic management and political intervention has imposed upon the primary producers.

THE MAJOR EXPORT CROPS

D.G.R. Belshaw and W.R. Stent

1. ROBUSTA COFFEE

THE ROOTS OF CURRENT PROBLEMS

Background to the Robusta Coffee Crop

Coffee dominates the present economy of Uganda and has done so, albeit to a lesser degree, since the early 1960s. Coffee's contribution to foreign exchange earnings had risen from around 50%, overtaking cotton in the early 1960s, to 58% by 1970. With the collapse of other exports such as cotton, tea and copper the proportion had risen to no less than 93% in 1977. The coffee industry is the largest single employer when the production, processing and transport sectors are put together. The coffee export tax dominates government revenue, contributing over 60% of the national revenue budget in 1977 (Shs. 2,000m.).

2. Two types of coffee are produced:

- Robusta, classified as hard coffee in the trade, and
- Arabica, the East African production of which, when wet-processed, is rated as a mild coffee and usually receives a quality premium over robusta; this crop is discussed in the following section.

3. According to estimates made by the Ministry of Agriculture, robusta coffee occupied an area of nearly 200,000 ha. in 1977 (detailed area estimates are unreliable given the absence of an agricultural census since 1963/64). This is located in the fertile, heavier rainfall areas of Buganda Region, with some smaller outlying areas in Busoga and Western Region but these amount to less than 7% of the robusta area. The greater part of the Eastern and Northern regions are unsuitable for coffee production. These areas do not share in the boom period prosperity which occurs with coffee from time to time, so that the distribution of the revenue of the coffee crop is a major political issue in the country.

4. Robusta coffee is produced almost entirely in the small-holder or informal rural sector of the economy, large-scale production having declined over recent years to less than 2% of the crop.¹ Coffee is often grown interplanted with another perennial crop - bananas - and sometimes with annual crops such as beans or sweet potatoes. The main cost of production is labour, especially for weeding and harvesting and much less frequently for pruning, spraying or applying fertiliser (these latter operations are recommended but for reasons discussed below were rarely carried out in the 1970s). Consequently, the costs of production are largely determined by:

- alternative opportunities - on the farm or off it - for the farm family work force, and
- the wage rate for hired labour.

5. Robusta coffee is usually sold by the farmer as sundried cherry (kiboko) to a cooperative society or trader whence it proceeds to a hullery owned by a cooperative union or private processor where the cherry is removed. The alternative wet processing method has virtually disappeared along with the small premium which wet processed robusta enjoyed before the world coffee shortage began in 1975. The hulled coffee is (or should be) finally milled at the Coffee Marketing Board (CMB) mills in Kampala before being exported as green coffee.

6. Between 1969 and 1974 the cooperative movement had a monopoly on buying and processing all kiboko in Uganda. Before and after these dates, however, processing has been shared between the cooperative unions and private coffee factories.

¹ Information supplied by the Coffee Marketing Board

Damage due to the War of Liberation

7. The robusta coffee producing areas of western and central Buganda experienced some of the sharpest fighting in the liberation war. The damage in Masaka District was largely inflicted by the Tanzanian forces as retribution for Amin's occupation and destruction of the Kagera area of West Lake Region before a decision was taken to advance further into Uganda with the objective of ousting Amin altogether.

8. Table 4.1 indicates the estimates of damage and loss submitted by the major robusta processing cooperative unions. These losses are superimposed on the generally weak or parlous financial condition to which the unions had been reduced by the pricing and foreign exchange licensing policies of the Amin regime (see Paper 3 above).

9. The most serious consequences from the point of view of the recommencement of operations are:

- the appropriation of lorries;
- the loss of coffee stocks by war damage or looting; and
- theft of cash at union and society levels¹.

These have combined to remove both the physical and financial means to move the coffee crop from the societies to the unions. Coffee buying has been suspended since January or February this year, only two-thirds of the way through the main crop season in most of Buganda. As the war also disrupted the alternative smuggling route, large stocks of coffee are currently held on the farms or, where they have not been looted, at the society and union levels. These stocks are estimated to be in the range of 40,000 - 60,000 tonnes clean coffee, representing a large sum of foreign exchange (Shs. 1,200 - 1,800m. at the current price of \$1.80 per lb.).

10. Crop finance and vehicles for the robusta coffee unions² are absolutely top priority items, therefore, which should be largely covered during the emergency aid phase of reconstruction, i.e. June - October 1979. The situation is particularly serious in the Masaka area where the main crop is currently being harvested and buying operations should recommence in July at the latest.

Effects of the Policies of the Military Regime

11. The most striking feature of Uganda's coffee industry in recent years has been the huge disparity between the value of robusta coffee on the world market and the price paid to the producer. When the 1975/76 price was raised to Shs. 2.50 per kg. kiboko (raising the average returns to the producer for the first time above the 1953/54 peak year) the equivalent value on the world market was over Shs. 13. A staggering 69% of the crop value was retained by the Ministry of Finance as export tax or as proceeds to the Coffee Price Assistance Fund. This proportion rose to 75% in the following year (see Table 4.2).

12. In neighbouring Kenya, Rwanda and Zaire where tax deductions were small, very much higher prices were obtainable - around three times the Uganda producer prices. Even in Tanzania where a sliding scale export tax is levied, prices have been 150-200% of the Ugandan level. In addition, as inflation gathered pace in Uganda in the last few years the weakening purchasing power of the Ugandan shilling gave a further sharp twist to the boarder price differential. By 1978 the differential reward for selling coffee

¹ It is not possible to distinguish theft and looting by the military of either side on the one hand or by the civilian population on the other. Major facilities were abandoned by the staff for several weeks. During this time it appears that Amin's troops especially broke open buildings looking for vehicle spare parts and cash and thereafter the open buildings were easy prey for certain elements who moved in to systematically remove equipment and spare parts. Finally, in some cases some of the general public stole consumer goods, roofing sheets or coffee.

² The Coffee Marketing Board offices have also lost one lorry, five cars and two small buses which should be included in the vehicle provisions for the coffee industry.

illegally in Kenya and using Kenya shillings to import consumer goods was probably in the region of 3000%.

Table 4.1
Damage and Losses sustained during the Liberation War by Robusta
Coffee Cooperative Unions
(Shs.m.)

Unions processing Robusta coffee	Physical damage	Vehicles value (no.)	Looting and theft	Total
Busoga G C U	-	3.0*(9)	-	3.0
East Mengo G C U	15.0	4.6(14)	5.3	24.9
West Mengo G C U	1.9	0.2(1)	4.8	6.9
Wamala G C U	-	1.5(5)	28.5*	30.0*
Masaka G C U	24.6	2.2(6?)	27.0	53.8
Bunyoro G C U +	-	3.4(10)	18.8	22.2
	41.5	14.9(45)	84.4	140.8

Notes: + Robusta coffee represents a minor part of the business of this Union.

* Rough estimate only.

Source: Cooperative Union submissions to the Team; all these Unions were visited and the major damage visually inspected by the Team, but the detailed estimates have not been verified.

Table 4.2
Distribution of Coffee Crop Value (%),
Uganda 1972/73 - 1977/78

YEAR	FARMER	MILLER	CMB ¹	TAX	SURPLUS ²
1972/73	39	10	11	30	10
1973/74	27	7	8	43	15
1974/75	32	8	10	39	11
1975/76	19	5	7	56	13
1976/77	15	4	6	66	9
1977/78	28	6	6	63	-3

Notes: 1 CMB : Coffee Marketing Board

2 The majority of the 'surplus' shown is paid by the Treasury into the Price Assistance Fund, which despite its name is used as a source of funds for budget expenditures in other sectors.

Source: Coffee Marketing Board

Table 4.3

Average Producer Prices for Coffee - Uganda, Kenya, Tanzania, 1974-79

		1974	1975	1976	1977	1978	1979
A. Producer Prices ¹ :	Uganda	15.2	15.9	15.2	27.2	40.4	42.55
(US Cts./lb	Kenya	62.9	59.7	121.4	218.6	149.6	na
green bean equiv.)	Tanzania	38.8	31.8	59.3	101.0	76.5	na
B. Producer Prices ² :	Uganda	1.19	1.25	1.40	2.50	3.50	3.50
(National curren-	Kenya	9.82	9.40	22.30	40.14	26.06	na
cy) Shs./kg.	Tanzania	4.80	4.00	8.40	14.90	11.00	na
C. Producer Prices ³ :	Uganda	1.55	1.29	0.99	1.11	1.04	0.86
in constant terms	Kenya	12.12	9.90	21.04	34.6	20.04	na
(Shs./kg. July	Tanzania	7.00	4.30	8.20	13.20	8.00	na
1975 = 100)							
D. Average Export ⁴ :	Uganda	53.2	49.1	88.3	188.0	125.1	na
Values (US Cts/lb)	Kenya	68.1	63.8	131.8	237.3	170.5	na
green bean	Tanzania	58.2	52.2	119.7	223.1	153.3	na
E. Proportion of	Uganda	28.6	32.4	17.2	14.5	32.3	na
Export Value	Kenya	92.4	93.6	92.1	92.1	87.7	na
paid to Produ-	Tanzania	66.7	60.9	49.5	45.5	49.9	na
curs (A/D)							

Sources: 1 Table IV - 15 International Coffee Organisation, Quarterly

2 Table IV - 12 Statistical Bulletin on Coffee, October -
December 1978 No. 8 (preliminary) May, 1979

3 Table IV - 13

4 Table IV - 8

13. Table 4.3 compares average prices received for Uganda coffees with those for Kenya and Tanzania. Row C suggests that in real terms the producer price of Uganda coffee had fallen by 45%. In fact, this is an under-estimate due to the faulty construction of the Uganda cost of living index used by the International Coffee Organisation to deflate market prices.

14. In these circumstances, it is less surprising that smuggling took place than that the majority of growers were still prepared to sell their coffee through the official channels. Rough estimates of quantities of coffee smuggled over the last four years are shown in Table 4.4 below:

Table 4.4

Estimates of Production, all Uganda Coffee, 1975/76 - 1977/78
(000 tonnes)

	1975/76	1976/77	1977/78
Recorded 'output'	137	157	121
Estimated smuggled quantities	25-30	50-55	45-50
Estimated production	161-167	206-211	166-171

Source: Verbal communication, Coffee Marketing Board

15. In addition to the losses of coffee from the official channels through smuggling, with the usual distortions in the pattern of income distribution which are associated with high-risk illegal activity, further losses to society occurred through theft of coffee in transit between the CMB mills in Kampala and its auction godowns in Mombasa. In 1976/77 the accounts of the Board showed a loss of some 24,800 bags which was valued at US\$94m. With the lower prices in 1977/78, this loss had declined to US\$18m.

16. The possibility of further losses arising through deliberate understatement of CMB purchases cannot be ruled out. The auditors' reports on CMB accounts have stated in every year since 1973 that:

- No quantity reconciliations of coffee movements during the year were prepared by the Board, as a result of which we have been unable to satisfy ourselves that all coffee purchased by the Board was accounted for.

Similar statements recur annually in these reports in respect of accounting for coffee bags. There were also other irregularities reported in each auditors' report. The responsibility for taking remedial action on receipt of such reports rests with the Ministry of Cooperatives and Marketing, but no action, apparently, has been taken to date.

17. Also it was widely alleged by cooperative union committee men that grading by CMB inspectors was subject to pecuniary influence. No systematic attempt was made to collect evidence on this issue but the widespread and anecdotal nature of the evidence indicates that the full trust of the Ugandan grower cannot be said to reside in the Board responsible for selling his coffee.

18. Coffee growers also suffered problems similar to those which affected all farmers under the previous regime:

- delayed payment if they sold to the cooperative side of the market. This was strictly illegal but due largely to problems of financial control within the cooperative movement;
- lack of production inputs, especially hoes, fertilisers and sprays;
- cessation of short and medium term production credit;
- lack of coffee drying trays;
- lack of bicycles and gunny bags to transport coffee from the farm to the society store or factory.

19. The cooperative unions responsible for processing and onward sale were also experiencing the usual run of problems, especially:

- narrow processing margins allowed by the Ministry of Cooperatives and Marketing;
- transport bottlenecks due to old vehicles or lack of spare parts;
- breakdowns in processing machinery, leading to over-large backlogs of coffee and hence higher interest charges on unrepaid crop finance;
- inadequate storage space to accommodate the inflated stocks, lack of roofing sheets and cement to build stores and therefore damage to inadequately stored coffee;
- competition from the private sector which had closer access to illicit marketing channels and paid cash on purchase of the growers' coffee, usually at prices above the price offered by the cooperatives. Lower throughput reduced cooperative union and society revenues in relation to stationary or rising levels of overhead cost;
- cooperative officials and members were barred from

relevant training courses given in overseas countries deemed to be unfriendly to Uganda.

The most tragic result of these problems perhaps is the opportunity lost to expand the coffee production base in a unique period of high prices without an operative quota restriction under the International Coffee Agreement. Without these problems Uganda would probably be heading for a 300,000 tonne crop in the very near future. This opportunity may not be quite lost; if it is, it will affect at least the next generation to come.

THE TASK AHEAD

20. Three major objectives confront the coffee industry under the new Government. The first is to maximise the proportion of the crop should through official channels, i.e. to minimise the illegal border trade in smuggled coffee; the second is to raise producer levels in the short-term and the third is to raise the future production capacity of the crop by both expanding the planted area and by replacing old or poorly established coffee.

21. The achievement of these objectives requires a continuation of incentive prices, appropriate institutional arrangements, and the provision of adequate resources for producing, processing and transporting the expanded crop.

POLICIES AND RESOURCES REQUIRED

Policies and Institutional Arrangements

22. The incentive for the Ugandan grower to produce more coffee and to sell it through the official channels must be sharply and significantly improved. Whilst greater availability and falling prices of consumer goods will raise the incentive to produce more coffee, a strong border differential will remain unless the producer price is raised to around 70% of the price in neighbouring countries. From our earlier analysis (Paper 3) we concluded that the robusta kiboko price should be doubled to Shs. 7. This would best be financed, in part at least, by an external devaluation of the domestic currency (see Paper 25 for the detailed analysis).

23. The possibility of illicit sales of coffee once it has reached the official marketing channels must be eliminated. To strengthen grower confidence there should be visible signs of vigorous government action in this area. The Ministry of Cooperatives and Marketing must take the necessary action on the auditors' reports of the CMB; at the least, the suspension is indicated of the most senior responsible officials whilst an official committee of enquiry reports on further action to be taken. This committee should hear evidence in secret from staff of the Board and of experienced and reliable persons outside it in the coffee trade and in coffee production.

24. The composition of the Board's membership should be reviewed as soon as possible so as to increase the effective representation of coffee growers. Under the present circumstances where revenue from coffee dominates the government budget, the role of the Ministry of Finance in determining coffee price policy is inevitable. In the longer term, however, there would appear to be considerable advantages (which hardly need elaboration in the light of the last eight years' experience) in replacing direct taxation, including export taxes and marketing board surplus, with indirect taxes such as sales tax and import duty. Under this kind of fiscal structure the coffee industry could become largely self-regulating in a way similar to that recommended for tea. Given representative producer control of the Board, the possibility (and temptation) of creating a dual marketing structure for coffee - which was presented to and exploited by the military regime - would be removed.

25. Given its abuse, it would also strengthen producer confidence if the so-called 'price assistance fund' were abolished as an accounting device. The original purpose of this fund would be secured, however, if the actual incidence of export duty, for as long as it continues, were calculated not on the export price but on the difference between the export price and the price actually paid to farmers in the previous quarter. The minimum producer price announced at the beginning of each quarter would be set in the light of (i) the expected export earnings, (ii) the target export duty yield¹, (iii) processing and marketing costs and (iv) the surplus or shortfall in export tax revenue

¹ This would be calculated on a sliding scale related to export prices, as at present.

earned in the previous quarter. Price setting would aim at eliminating any 'surplus', i.e. as high a producer price as possible would be set as compatible with the set of expected and actual values. Treating export duty as the residual element is not expected to add to fiscal uncertainty, as international price movements which are impossible to predict accurately, affect the yield under any alternative tax structure.

Investment Projects

26. A major coffee rehabilitation programme is recommended. At expected levels of world prices over the next few years, the improvement of productivity of existing coffee is expected to show a very high return. Also new high yielding varieties of coffee developed by the Ministry of Agriculture's Research Division should be used to replace old or badly established coffee and to provide sources of income for new entrants to the farm population.

27. The programme consists of two projects for robusta coffee.¹ The first consists of a major extension campaign to demonstrate improved production practices and to provide pruning and/or replanting services and inputs to growers. The cost of this project totals Shs. 13.9m. over two years, including foreign exchange costs which are estimated at Shs. 13.6m.

28. The second project consists of the provision of fertilisers, insecticides, spray pumps and farm tools to coffee growers, together with vehicles for the agricultural extension field staff assigned to coffee duties. Inputs should be made available to farmers for cash or as short-term production credit both via cooperatives and via a special agricultural scheme using the shops in the rural service centres as points of supply. The total cost of this project is Shs. 172.37m. over two years.

29. The effectiveness of these projects will depend in large part on a strong incentive system for sales through the official marketing channels and on the effective organisation and equipment of the agricultural extension service. The latter must be galvanised into action after some years of being starved of resources to do an effective job. A series of staff seminars and short courses should be organised in advance of the receipt of donor support. Although benefits will accrue from stirring farmer enthusiasm for a national coffee productivity campaign, an advisory rather than a directive stance by the extension service is more likely to generate the cooperation and trust of the growers which must be carefully restored after the years of neglect and exploitation by the Amin Government.

30. Measures are urgently required to restore the operational effectiveness and financial viability of the cooperative unions which play an irreplaceable role in the marketing and processing of the robusta coffee crop. These measures have already been outlined in Paper 3 above. They need to be worked out in detail for each particular union, and together with the revised producer price put into effect as quickly as possible without waiting for the conclusion of arrangements for donor support for the coffee rehabilitation programme.

2. ARABICA COFFEE

THE ROOTS OF CURRENT PROBLEMS

31. The greater proportion of Uganda's arabica crop is grown on the slopes of Mt. Elgon. It usually has a higher unit value than robusta and therefore its contribution to export earnings is generally greater than its proportionate volume; in 1970 it constituted 6% of total coffee production but 9% of export earnings. All arabica grown on Mt. Elgon is bought as parchment and that which is sold in Uganda is subsequently processed by the Bugisu Cooperative Union's mill at Mbale. Small quantities of arabica coffee are also grown in Ankole, Toro and Kigezi districts. They are all sold as kiboko (official purchases of arabica from these districts amounted to 1975 tonnes in 1976/77).

32. Bugisu arabica has been smuggled to Kenya on an extensive scale. In 1970/71, 12,945 tonnes of parchment were purchased by the Union and this rose to 15,514 in 1972/73.

¹ Details of these projects are available in papers filed in the Commonwealth Secretariat; they are also obtainable directly from the Ministry of Agriculture in Entebbe.

From this peak purchases dropped drastically to 971 tonnes in 1977/78. It is estimated that 6,000 tonnes will be purchased in 1978/79 but the quality is low.

33. From 1970/71 to 1976/77 the price paid for parchment remained virtually unchanged even though consumer prices greatly increased and the unofficial value of the Uganda shilling fell relative to the Kenya shilling. This provided a major incentive for individuals to become smugglers and, as a result, an increasing proportion of the crop found its way across the border to Kenya. The price paid for parchment was increased in 1977/78 (from Shs. 4.65 per kg. for Grade I to Shs. 7.70), and this price was maintained during 1978/79. In that season considerable pressure was put on producers to sell the crop to the Bugisu Union. As a result purchases greatly increased but the quality fell drastically - much coffee having a moisture content of 24 to 30% rather than the desired 13%. At the same time, the Kenya authorities stepped up their anti-smuggling activities.

34. It is, of course, impossible to assess the total volume of the crop, but even though the area under coffee has been estimated by the District Agricultural Officer to have remained constant (at 14,100 ha.) throughout the period under review it seems highly likely that there has been a significant decline in production.¹ The principal reason for this has been the effect of the fall in real terms of the price offered by the Union. This was, of course, offset by the possibility of smuggling but that was always associated with risks and the lack of easy access to imported goods gave the majority of producers little incentive to take them.

35. Transport in the area has been a major problem. Roads were originally looked after by the Bugisu Coffee Board but in 1960 they became the responsibility of the local administration. Since 1972 they have deteriorated markedly and are often impassable. In addition the fleet of vehicles owned by the Union has been greatly depleted - in 1970 it had 40 lorries operating but it now has only 10, many of which are rarely available for use because of the lack of spare parts, including tyres. The Union's transport situation has been further exacerbated by the looting of one lorry and a Fiat Campagnola. The reduction in the availability of Union transport may have been partially offset by the increase in trucks owned by smugglers. On balance, however, it seems likely that the number of vehicles servicing the area decreased over the period under review.

36. The lack of transport has meant that coffee has often been stored for long periods in the primary society stores and this has prevented them buying any more coffee. Coupled with this has been the decreasing liquidity of the entire Union, due to the low margin between the purchasing price of parchment and the selling price of processed coffee to the Coffee Marketing Board (CMB) and to the reduced through-put of the mill. Accumulated losses of the Union have, since 1971, reach Shs.11 m. and to this problem must be added the fact that the Union suffered losses of Shs. 1.8m. as the result of recent looting. In the 1978/79 season the Amin administration forced the Union to buy all parchment coffee offered to it at Grade I prices even though much should have been rejected. Onward sales to the CMB are bound to be at a loss. The Union requires advances of Shs.500,000 per day at the height of the buying season, but after liberation, like all other businesses, it was unable to draw more than Shs.50,000 per week from the Uganda Commercial Bank. This restriction was lifted in June, but overdraft limits now play a similar role. As a result primary societies are currently holding between 1,500 and 2,000 tonnes of parchment which the Union is unable to buy.

37. Crop husbandry has fallen in standard - chemical in-puts have become virtually unobtainable, except at magendo prices, and the lack of hoes, etc. has led to considerable areas of coffee becoming overgrown and unpruned. The coffee spraying programme to control Antestia, leaf rust and coffee berry disease has not been effective for several years.

38. In the 1960s a series of central coffee pulperies was established in order to overcome the problems of quality control associated with the use of hand pulpers. Eventually there were 28 but by 1974 only six remained in operation. Since then none has operated and the entire crop has been pulped by hand. However, as with all other imported items, handpulpers have become virtually unobtainable. So, too, have the bags necessary for the transportation of parchment to the primary societies.

39. The physical damage and losses sustained by the cooperative unions handling

¹ It is hazardous to estimate the 1978/79 production but allowing for 20-40% of the crop having been smuggled we estimate that production was between 7,500 and 10,000 tonnes of parchment (i.e. 6,000 to 8,000 tonnes green bean equivalent).

arabica coffee, including those in Western Region, are summarised in Table 4.5 below. War damage was particularly severe in the Mbarara area, with the result that the functioning of the major coffee cooperative in the Western Region - the Banyankole Kweterana Growers Cooperative Union - has been completely impaired. This will require major capital assistance on an emergency basis.

Table 4.5
Damage and Losses sustained during
the Liberation War by Arabica Coffee
Cooperative Unions (Shs.m.)

Unions processing Arabica Coffee	Physical Damage	Vehicles Value (No.)	Looting & Theft	Total
A. Bugisu Arabica				
Bugisu C.U.	-	0.5 (2)	1.5	2.0
B. Western Region Arabica				
1. Banjankole Kweterana G C U †	23.5	7.8 (22)	4.7	36.0
2. Kigezi G.C U †	-	0.2* (2)	-	0.2*
3. Nyakatonzi G C U †	-	3.1** (7)	0.2	3.3
	23.5	11.6 (33)	6.4	41.5

Notes : † These Unions also process some robusta coffee; the arabica coffee is dry processed.

* Rough estimate only.

** Book values; replacement costs estimated at Shs.4.2m. including spare parts.

Source : Cooperative Union submissions to the team; all these Unions were visited and visually inspected by the team, but the detailed estimates have not been verified.

THE TASK AHEAD

40. The rehabilitation of the arabica coffee industry depends fundamentally on changing the present pricing structure to bring it more into line with world price levels. We have discussed this in Paper 3. The production of arabica coffee will also be increased by improving the availability of the various inputs, both chemical and physical, which have for long been in short supply. If the level of general crop maintenance is to be raised it will also be necessary to increase extension services to the farmers. This will require the establishment of spray-teams and the provision of suitable transport for them. And it will be necessary to improve the transport facilities provided by the Unions.

41. The Bugisu Union has a particular problem of financial solvency. Only when the delivery of the crop to the Union's coffee mill can be assured will the Union have sufficient throughput to run profitably. It could probably trade itself out of its present parlous financial state provided that its bankers are prepared to advance it adequate crop finance. The factory itself is in need of repair and maintenance and farmers long deprived of an adequate supply of tools and chemical inputs will require considerable quantities of these in the rehabilitation project (see following section).

POLICIES and RESOURCES REQUIRED

42. In addition to the emergency aid required to restore the cooperative unions to an adequate level of operational effectiveness, three projects for the rehabilitation of

arabica coffee production in the field have been identified by the Ministry of Agriculture. If effectively implemented, the probability seems high that they will provide a high rate of return, especially through their capacity for raising foreign exchange earnings significantly within the reconstruction period. They should therefore be accorded a very high priority within the overall rehabilitation programme.

43. The three arabica projects are summarised in Table 4.6; further details are available in the submission of the Ministry of Agriculture which is lodged with the Commonwealth Secretariat.

Table 4.6
Proposed Arabica Coffee Projects

Project	Recurrent		Capital	
	1979/80 Total F.E. (Shs.m.)		1980/81 Total F.E. (Shs.m.)	
Rehabilitation of Bugisu arabica production	4.2	4.2	4.2	4.2
	1.1	1.1	-	-
Coffee berry disease control, Western Region	0.5	0.5	0.5	0.5
	0.5	0.5	-	-
Rehabilitation of Western Region Arabica production	1.8	1.8	1.8	1.8
	1.0	1.0	-	-
TOTALS	9.1	9.1	6.5	6.5

Source : Ministry of Agriculture submission, 1979

3. TEA

THE ROOTS OF CURRENT PROBLEMS

Background Information

44. At present there are 20,906 ha. of tea at different stages of development stages of development; about half of this is abandoned but retrievable. The tea is grown by several categories of organisation:

Private Estates. These are owned by individual companies and by some co-operative societies. Some individual estates have been abandoned recently by their former owners and are awaiting re-allocation.

Government Estates. These are managed by:

- Agricultural Enterprises Ltd.
- The Uganda Tea Authority which runs estates on behalf of the Government on a temporary basis.

Small Outgrowers. These are organised under the auspices of the Uganda Tea Growers Corporation. They together form a small-holders tea project which on paper involves around 11,000 growers with a total area of nearly 9,500 ha.

45. The tea industry is run under the overall supervision of the Ministry of Agriculture. There are three parastatal bodies charged with executive functions for the industry:

Agricultural Enterprises Ltd. (AEL). This was established in 1965 as a subsidiary company of the Uganda Development Corporation (UDC), a fully-owned company of the Uganda Government. It comprises six estates and factories which are also registered as separate companies.

Uganda Tea Growers Corporation (UTGC). The UTGC was established in 1966 under an Act of Parliament. It is strictly a service corporation which gives advice to small tea outgrowers and is responsible for transporting their leaf to various factories. UTGC also runs five factories on a temporary basis on behalf of Government.

Uganda Tea Authority (UTA). The UTA was established by decree in 1974 'for the promotion and development of the tea industry in Uganda and to market manufactured tea'. It is the sole exporter of Uganda tea to external markets. In addition to these functions it is currently managing five estates on behalf of the Government on a temporary basis.

46. Seventy % of the small -holders were organised into 29 cooperative societies but most of these have become moribund with the decline of tea production over the last four years 80% of their tea being reported to be abandoned.

47. Up to 31 December 1978, tea research in East Africa was jointly undertaken by the three East African countries. There was a central research centre at Kericho in Kenya and in Uganda there were two sub-stations at Rwebitaba in Toro and Salama in East Mengo. Given the recent date of this arrangement, it may be fairly easy to put this cost-saving pattern of cooperation back together again. Otherwise, the restructuring of tea research is a long-term exercise which is not, in our view, a high priority, and is not discussed further in this report.

Effects of the Liberation War

48. The major effects of the liberation war have been on the industry's transport fleet. Virtually all lorries, tractors and trailers belonging to the industry have been looted during the war by Amin's soldiers or borrowed by the Tanzanian forces. Crop movements and production are therefore at a standstill. Looting has also occurred in certain head offices - equipment, stores, furniture, etc. whilst several parastatal and private estates have had cash, office equipment and furniture stolen.

49. Damage to the electricity grid installations at Mityana and Mbarara has also prevented factory operations restarting in most of the Western Region where the major part of the industry is located.

Effects of the Policies of the Military Regime

50. Due to the low relative producer prices of tea compared with rising costs of labour, consumer goods, farm inputs and transport and, for the small-holder, opportunities for more profitable self-employment of family labour in trading and smuggling activities, over 11,000 ha. out of a total planted area of 21,000 had been abandoned by May 1979.

51. Severe difficulties had been experienced in maintaining production on the remaining tea areas due to exorbitant costs and non-availability of supply in the following areas:

- Fertilisers and insecticides;
- Tea chests, the supply from the Wood Industries Corporation being at a standstill due to lack of components;
- Packing materials, e.g. tea chest liners;
- Gunny bags and nylon bags;
- Spare parts for vehicles and factory machinery;
- Furnace oil.

These problems became particularly severe from 1975.¹

¹ The East African Development Bank drew attention to these problems in its report 'The Uganda Tea Industry' in 1975.

52. On the small-holder side, unreliability of transport collection schedules due to problems with maintaining vehicles and the poor quality of feeder roads due to lack of maintenance led many farmers to abandon their tea on these grounds alone. Transport to collect the green leaf should be provided daily along the feed roads. There are 530 km. of such roads in Western Region which it is the responsibility of the District Administration's roads supervisors to maintain. Lack of spare parts or replacement vehicles and labour shortages has meant, in fact, that the District Administrations have not been able to maintain the roads they were originally charged with, let alone take over the additional feeder roads. In consequence many of the latter are now badly eroded and impassable in wet weather.

53. The shortage of labour was brought about by excessive domestic inflation. Due to the high costs of goods, particularly essential commodities, workers abandoned the estates and went home to produce their own food to feed their families and sell the surplus; in this way they could earn more money than on estates. As a result tea estates are now using one-third of their usual labour requirements.

54. These problems are reflected in a number of ways:

- The cessation of new planting;
- A decline in output following the abandonment of tea;
- A decline in the quality of the tea that was produced;
- The financial quasi-bankruptcy of the key parastatal organisations set up to handle the industry's affairs.

55. The area of planted tea stood at 16,620 ha. in 1970 and through additional small-holder planting had risen to 20,905 ha. by 1975. New planting ceased after that year so that the planned small-holder area was only half completed. This has meant that fewer of the UTGC and the completed factories, and the ensuing unit costs are higher than was originally intended. This problem had become even more severe with the widespread abandonment of small-holder tea.

56. Table 4.7 indicates the decline in output since the expulsion of the Asian community in 1972 - the first stage of the economic war. This decline set in despite the effects of new acreage coming into bearing. It reflects the departure of both management - a number of estates were Asian owned - and the loss of technicians for both the factory and vehicle maintenance aspects of the industry.¹

Table 4.7
Annual Production of Tea: Uganda, 1970-78

Year	Production (kgs)	Production Index (Base 1972)
1970	18,217,240	78
1971	18,004,654	77
1972	23,376,162	100
1973	21,888,230	94
1974	21,687,739	93
1975	18,373,741	79
1976	15,388,166	66
1977	15,179,097	65
1978	10,910,114	47

Source: Uganda Tea Authority

¹ The East African Development Bank also reported a shortage of accountants in the industry due to the departure of Asians : op.cit.

57. With the acute shortage of wage labour from 1975 to the present time, leaf is not picked at the required time which is normally every seven days. Plucking rounds have now risen to 21 days. With long plucking rounds, the leaf picked is usually long, coarse and hard, characteristics which are very undesirable for making good quality tea. Tea manufactured from such leaf consequently fetches very low prices both in the local and the world market. Table 4.8 presents annual average prices realised in the Mombasa auction for Ugandan, Kenyan, and Tanzanian teas in 1977. Tanzanian sales figures for 1978 are not available for comparison. Formerly Ugandan teas sold at prices much closer to the Kenyan teas.

Table 4.8

Average Prices received in the Mombasa Auctions:

Kenya, Tanzania and Uganda Teas: 1977/78

(Shs./kg made tea)

	1977	1978
Kenya	19.59	13.44
Tanzania	13.01	n.a.
Uganda	11.72	7.27

Source: Uganda Tea Authority

58. At the current international value of the domestic currency, Uganda's tea industry as it stands today cannot support itself financially unless money is given to subsidise prices or in the form of production grants. Statistics showing the price realised as against the estimated costs of production¹ for the past five years are shown in Table 4.9 below:

Table 4.9

Average Realisation and Costs of Production,

Uganda Tea, 1974-78 (Shs./kg. made tea)¹

	1974	1975	1976	1977	1978
Realisation	6.57	7.12	9.08	14.30	7.36
Cost of Production	5.29	7.78	10.77	11.77	14.40

Note: ¹ The details of the calculation of these costs of production have not been examined by the Team

Source: Uganda Tea Authority

59. The UTGC reported that in 1978 the Government, in order to maintain the green leaf price of Shs. 1.35 per kg. had to provide a subsidy of Shs. 15m. whereas small-holders had costs of production of around Shs. 2 per kg. of green leaf (this presumably includes an imputed charge for family labour).

60. The small-holder has also suffered, as was mentioned earlier, by the freeze on further expansion in his sector. Phase II of the small-holder project, which was to have been carried out with IDA funds in the period 1973-77, was suspended in its first year of operation.

61. The overall cost of this multitude of problems may be gauged by comparing the value of actual export sales in 1978 with an estimate of the minimum 'normal circumstances' revenue - 1972's peak production valued at 90% of Kenya's average values. Instead of Shs.79.5m., sales earnings of Shs.282.6m. could have been obtained i.e. over 3½ time more,

or an extra Shs. 202.3m., nearly all in foreign exchange.

62. Finally, the organisational structure of the industry has caused problems of conflicting priorities, duplications and set-backs for the small producer. Until 1974, estates and the UTGC on behalf of outgrowers were able to sell their tea directly through the Nairobi auctions. This had the particular advantage of bringing quality differentials directly to the notice of managers and growers. With the institution of the UTA, however, this direct link was broken and an additional hierarchical level interposed in both the product market and the purchasing of inputs. Further, the UTA has been given direct managerial responsibility for five 'allocated estates' i.e. foreign or Asian-owned estates which were nationalised in 1972/73. This, it was represented to us on several occasions, has led to a conflict of interest between UTA's responsibility to the industry as a whole and other pressing needs, e.g. for inputs for its own estates. Also, various complaints about delayed payments for tea sold by UTA have been made which point to UTA's own cash flow problems as the primary cause. The effects of delayed payments are particularly severe for the small-holder, and were said to be a material factor in their losing their workers and in the widespread abandoning of tea in the small-holder sector. We make proposals about the broad nature of reforms which appear necessary for efficient operation of the industry in the latter part of this paper.

THE TASK AHEAD

63. The objective during the reconstruction period must be to restore the capital assets represented by the whole planted tea area to the most socially efficient level of operation and to raise the quality of production to a similar level. All the abandoned tea is technically retrievable and can be brought back into full bearing in a period of between four and six months, given the right management and fertiliser applications. The benefits for the national economy in terms of foreign exchange are certainly significant and worth having, whilst further benefits will be obtained in the local rural economies from the multiplier effects of tea incomes and wages. The rehabilitation of the tea industry is recommended, therefore, as a matter of very high priority.

64. This will require both a set of appropriate policies and a large aid programme consisting of several distinct projects. The policy framework is vital - without proper attention to this area the probability is high that, however large, the material inputs and technical expertise will be ineffective and wasteful.

POLICIES AND RESOURCES REQUIRED

Policies

(a) Prices:

65. The small-holder sector, which accounts for nearly half the area of planted tea, consists of 11,000 growers who once had high expectations that tea would provide a major, or even the only, source of their cash incomes. Currently, 80% of their 9,500 ha. is reported abandoned. The green leaf price is currently Shs. 1.35 per kg., having stood at that level for the last three years. Even to maintain that price on the reduced area, the Uganda Government has had to provide subsidies amounting to Shs. 15m. in 1978. An analysis of comparative enterprise profitability in the small-holder sector (see Paper 3) indicates that it is necessary to raise the green leaf price by at least one third i.e. to Shs. 2.00 per kg., if grower interest is to be adequately rekindled in the crop.

66. On the estate side, it is clear that many estates have been facing profitability problems; over one-third of the planted area is reported abandoned. Although real labour wage rates are expected to decline as the economy returns to normal - and the key question here is how rapidly will they do so - the estates will face over the next two years massive outlays on the deferred maintenance of capital plant and virtually 100% replacement of their lorry and tractor fleets due to the events of the liberation war. They will be neither able nor inclined to do this without the prospect of significantly increased earnings which an immediate increase in tea prices will secure.

67. As was indicated in the agricultural pricing section, one administratively simple way of restoring the profitability of the tea industry is through the external devaluation of the domestic currency. Another feasible alternative is to continue, and indeed significantly increase, the level of direct subsidies provided by Government to the industry or segments within it. This is not desirable, in our view, as the profitability of tea is then dependent on the vagaries of the political process. The industry, or sections or individuals within it, will seek to cultivate a patron-client relationship to obtain sectoral or individual advantages. This can only lead to further distortions in the allocation of resources and/or the distribution of income which are undesirable from the viewpoint of national society as a whole.

(b) Institutional Arrangements for the Tea Industry

68. In our view, it is essential to restore direct access to the market for individual estates and by UTGC on behalf of small-holders. This is desirable on grounds both of efficiency with respect to achievement of high quality levels of made tea, and equity in terms of prompt payment to low-income small-holders. This objective requires restructuring the major organisations in the industry.

69. The details of such a reorganisation will need to be determined as rapidly as possible by a committee of officials and representatives of the industry which should report to the Minister of Agriculture. However, the broad lines of the required reorganisation which in our view would provide a secure basis for the physical and financial reconstruction of the industry is outlined in the succeeding paragraphs.

70. The UTA should be reconstituted as soon as possible as the Tea Board of Uganda, with a strictly limited role in the areas of financing research and publicity on behalf of the industry, assembling market intelligence, collecting statistics and advising the Minister of Agriculture with respect to matters concerning the industry.¹ The ownership and management of tea estates should be divested to AEL, or to the previous owners in accordance with specific government policy with respect to these matters. The members of the Board should be drawn from both the official and private sides of the industry, but with a preponderance of members engaged in the business of tea production i.e. estate owners and small growers. The staff of the new Board should be limited to that strictly necessary to carry out its new duties, and other staff should be transferred as far as possible to other posts within the tea industry or the Ministry of Agriculture.

71. UTGC should also divest itself of its responsibilities for estate management in ways similar to those recommended for UTA. It may also strengthen growers' confidence if in the course of restructuring the Corporation its name were changed and any savings in staff and other costs were agreed on simultaneously.

72. Some 7,600 out of the 11,000 small-holders were formerly organised into 29 cooperative societies, only 16 of which were formally registered as such. With the wholesale abandonment of tea, most of these societies are reported to be moribund. It was intended, however, that the ownership of the UTGC factories be vested in the cooperative societies. Indeed, a contribution is deducted from each grower's green leaf revenue towards paying off the capital cost of the factory, whether existing or prospective, which processes his tea. Doubt must be cast, however, on (i) the enthusiasm of the growers for reforming cooperatives, and (ii) the wisdom of forcing these additional ownership costs on growers at this early and untested (and as events turned out, financially disastrous) stage in the establishment of this particular mode of production.

73. It is recommended that two alternative arrangements be examined alongside the present ones:

- Where growers do not wish to revitalise their cooperative society or to form one at all, ownership of the tea factory be secured by the voluntary

¹ The Board would also collaborate with the Central Bank in surveillance measures against transfer pricing or any other undesirable financial practices in the industry.

share subscription method, as is practised for example in the similar case of the Kenya Tea Development Authority's factories. This procedure would have the benefit of loading the capital costs upon those growers able and willing to bear them. A maximum number of shares, however, should be prescribed for ownership by any one individual or family so as to prevent outright individual ownership of the factory. Consideration could also be given to the introduction of mixed cooperative/private systems of ownership, e.g. with the cooperative society retaining control of 51% of the shares.

- Secondly, an option could be provided for the deferment of the capital changes, instituting a system of leasing a state - owned factory. The rental for the lease would be equivalent to the interest on the capital investment. The advantage of this system is that the rentability of the asset becomes the clear financial responsibility of the state which would be penalised for neglecting to maintain a viable environment for the industry. This arrangement is preferable to the recent circumstances where all the direct costs have been transferred onto the grower. Growers in each area should be permitted to choose, on a democratic basis, whichever system they prefer after a clear explanation of the financial and management implications of each arrangement.

74. Estates in the private sector should be enjoined to seek the advice of experienced consultants to review the operating efficiency of their factories and plantations. Ugandan or international banks should be encouraged to finance this operation on a medium-term development loan basis.

75. In the event a failure on the part of owners of planted tea, whether large or small, to rehabilitate their tea within a reasonable time from the commencement of the tea rehabilitation programme, say two years, enabling legislation should be invoked, or introduced as necessary, to permit the compulsory acquisition of the tea area and any associated processing, storage and other buildings for sale at public auction. The proceeds would be paid to the owner(s) less a small commission charge covering the expenses involved in the valuation and sale of the asset.

76. The overall objectives of these suggested reforms is to integrate producers of all sizes more directly into the international market, where the crucial signals for quality are displayed, and in so doing to improve both the producers' control over the general direction taken by the industry and their supervision of the services provided to the industry. The dominance of producer interests in the oversight of export crop production where the country's elasticity of demand is high, as is the case with Uganda tea, is more likely to maximise the benefits obtained for the national economy than a system of extensive state control. In our view, the events since 1974 clearly support this thesis.

Resources Required

77. It is proposed that a major Tea Rehabilitation Programme be introduced, to be financed largely by foreign aid. The programme falls into a number of discrete projects, so that either one donor could assume responsibility for all aspects of the industry, or a group of donors could cooperatively agree to fund the range of component projects between them. The physical and financial details are summarised in Annex 4.1 whilst supporting detailed submissions from the parastatal bodies and some cooperative societies have been lodged with the Commonwealth Secretariat.

78. Some elaboration is required on some of these items. These can be conveniently discussed under the headings small-holder production, parastatal estates and private estate production.

(a) Small-holder Production

In addition to the transport, production inputs and factory equipment requested by the UTGC, which are shown in Annex 4.1 a crucial component is the completion of three new factories which are financed under a loan from the African Development Bank (ADB).

The project comprises:

- Three new tea factories, including staff houses and labour lines, in Buhweju (Ankole), near Kyenjojo (Toro) and near Mityana (Mubende);
- Green leaf collection centres feeding the factories above;
- 25 km. of third class gravel access roads to the Buhweju tea factory;
- Leaf collection service vehicles;
- Equipment for a road maintenance unit.

79. The cost of these items as estimated by the ADB in 1975 and negotiated by the Government of Uganda (GU) in 1976, was Shs. 66.256m. GU and ADB are jointly financing this project as follows:

ADB Shs. 48.348m., all in foreign exchange;

GU Shs. 17.908m., all in local currency.

The details are set out in the submission of the UTGC.

80. Article LV 6.01 of the Loan Agreement between the two parties (signed on the 14 March, 1977) stipulates that 'The borrower (Government) has undertaken to meet any cost over-runs, both foreign exchange and local, in excess of the present estimates of the Project'. This presents a problem which must be resolved if the factories are to be completed, as costs over-runs inevitable will be encountered.

81. The Ministry of Works, Transport and Communications is responsible for the implementation of the third and fourth, and the UTGC for the rest of the items listed above. To date, only the work on the factories and 10 kms. of road has been started. Implementation of the other items is currently awaiting recommencement of work by the builders whose vehicles were stolen during the recent war.

82. Another major element in the small-holder sector is the restoration of the deferred second phase which was to have been funded by the World Bank in association with the Commonwealth Development Corporation. In general, we feel that further expansion is desirable, although it may be viewed as being a matter of lower priority than other components of the tea programme during the two year reconstruction period. However, the information concerning the interest of the previous donors in this project - and sources of alternative support if necessary - should inform the decisions of the review committee before long-term decisions are taken about the scale of operations (and the associated manpower resources) for which UTGC is to be responsible.

83. Whatever the decision on Phase II, the question of rescheduling UTGC's debt repayments should be discussed with the donor creditors to arrive at a more realistic relationship between the small-holder sector's ability to pay and the payments schedule. This would hopefully include writing down some part of the accumulated interest charges.

84. The UTGC has requested technical assistance in the form of one engineer and three teamakers. These needs should be reassessed as quickly as possible after the reorganisation of the tea industry which has been recommended in the previous section.

(b) Parastatal Estates

85. The UTA has been exploring the financial implications of investing in a caffeine extraction plant. At a capital cost of Shs. 9.5m. for a 20 tonne a day plant, some 200 tonne of caffeine a year could be produced. This can process material produced from pruning and skiffing the currently abandoned areas of tea. But if all tea is brought back into production by the end of that period, the future supply of prunings appears problematic. If a private firm views the situation more optimistically, we recommend that they be given an allocation of foreign exchange for this supplementary project.

86. The UTA has also requested technical assistance, in the form of two experienced accountants and one factory engineer. These needs should be reassessed once the role of

the new Board has been defined.

(c) Private Estates

87. Although new capital investment on private estates would qualify for capital investment allowances against company tax, this is unlikely to overcome the cashflow problems of many estates. Consequently, the rate of reconstruction of their factories and planted areas is unlikely to be as rapid as would be desired when considering the value to the national economy of their potential foreign exchange earnings. We recommend that private estates have access to foreign aid capital on the same grant or loan terms as the parastatal estates.

4. COTTON

ROOTS OF CURRENT PROBLEMS

88. Cotton has, since the mid-1950s been Uganda's second most important export crop. It is however, more widely grown than coffee; the UNDP/FAO Programming Mission estimated that it was grown on approximately 60% of all holdings in Uganda. Production is entirely small-holders cultivating, in the main, areas of from one third to one acre. In 1973 it was estimated that over 2½ m. farmers owed their livelihood to the crop.

89. Between 1970/71 and 1976/77 production fell from 412,700 to 74,422 bales (of 185 kgs. each). The Lint Marketing Board (LMB), which has monopoly marketing rights over all lint and cotton seed produced in Uganda, has estimated that production will be 108,000 and 60,000 bales respectively for the 1977/78 and 1978/79 seasons. It seems probable, however, that in each case these estimates are over-optimistic. Certainly the statistics on which such estimates are based are unreliable.

90. The principal reason for what amounts to a massive abandonment of the crop was the low return that growers received for it. This was compounded by the increasing inability of primary societies to pay cash on delivery which resulted in some growers having to wait for up to 12 months for payment. In 1970/71 the price paid for raw cotton was Shs. 1.25 per kg. In 1972/73 this was raised to Shs. 1.30 and in the next two years to Shs. 1.65 and Shs. 1.90. In 1977/78 the price was Shs. 3 and for 1978/79 Shs. 5. These price rises were, however, proportionately not comparable to those of the farmers' basic necessities or of food sold on the 'free' market. Because of this many farmers abandoned the crop in favour of food crops, especially groundnuts and sim-sim. Not all growers made that transfer, however; some reduced their total area under crops.

91. In addition to the disincentive of low prices, cotton growers were faced with increasing difficulties in the planting and cultivation of the crop. For best results the seed should be planted in April or May and planting after July is often of little value. The timely availability of dressed seeds is therefore of prime importance but, as transport facilities progressively deteriorated after 1972, farmers were unable to obtain seed early in the season. The effects of liberation and its immediate consequences exacerbated this problem and in some cases, such as Lango and Acholi, no dressed seed has yet been distributed for the 1979/80 crop.

92. Farmers were also confronted with the non-availability of essential inputs. Hoes became almost unprocurable except at magendo prices outside the reach of small producers. In the northern districts where ox-ploughs are used they, too, were in short supply. Formerly, suitable areas of cotton land were opened up by tractor but the tractor hire service virtually ceased operations. Some privately owned tractors were available for hire but the cost was far in excess of that payable by most growers.

93. Chemical inputs, both fertilisers and insecticides, also became unobtainable. The shortage of basic necessities, even those derived from cotton and its by-products - soap and textiles, gave farmers very little incentive to grow the crop except when, because of their favourable geographical location, they were able to smuggle it into Kenya. There the price paid for cotton during 1978 was K.Shs. 3.45 compared to U.Shs.5. However, the purchasing power, in terms of consumer goods, was estimated by farmers to be equivalent to at least U.Shs. 30.

94. All ginneries in Uganda are currently under the control of growers' cooperatives. Their present installed capacity has been estimated by Uganda Cooperative Central Union to be 350,000 bales of lint per four months season, but this, like the LMB's estimate of the current crop is likely to be a gross exaggeration. Indeed, current capacity may only be one-third of this. Certainly the Union's claim that the rehabilitation project 'in progress' would be completed this year is clearly incorrect. Construction of the most advanced of the new ginneries, at Tororo, commenced at the beginning of 1978 but no work has been done there since September of that year. At least six months more work is involved, given the necessary supplies, but it lacks 400 tonne of steel. Construction of the other three mills has not yet begun, even though the bulk of the machinery was delivered early in 1978. Eleven other ginneries are under 'rehabilitation and modernisation'. All the machinery and equipment for these have been bought and are reported to be either on site, or en route from Mombasa but construction at all sites is hampered by lack of cement and reinforcing steel.

95. All ginneries have been badly hampered by inadequate plant maintenance due to lack of essential spare parts and basic tools. Labour has also often been in short supply because in most areas labourers were not prepared to work for the minimum wage of Shs. 240 per month.

96. Ginning was often further hindered by the lack of hessian for baling the lint and the consequent inability to store the sheer volume of ginned cotton. As a result of such delays the period of operation of the ginnery has often been prolonged so that even reduced throughputs take many months longer than would be expected. Such ginneries, and those which have been unable to dispose of their ginned lint because of a lack of transport, frequently were unable to accept further supplies of cotton from primary societies because of their lack of storage. At other times, a lack of transportation prevented unions from being able to bring raw cotton to the ginnery. In either case this has resulted in primary societies eventually being unable to accept cotton from farmers. If the cash value of the cotton able to be stored by the primary societies exceeded that which could be bought with the crop purchase advances from the unions, they were tempted to accepted farmers' deliveries 'on credit', leading to long delays in paying for the cotton.

97. The reduced rate of throughput of the ginneries, together with the reduced cotton crop, led to marked increases in the per kg. costs of ginning but there was little increase in the margin payable to ginneries. Thus one ginnery estimated, on a throughput of 1,232 bales in 1977/78, that their costs associated with ginning one bale of cotton were Shs. 4,244 as against an average return of Shs. 3,674 (i.e. a loss of Shs. 570 per bale). As a result all ginneries in recent years have been operating at a loss, greatly increasing their shortfalls so that at the end of 1978 the cotton unions owed the banks in excess of Shs. 200m.

98. After being separated from the lint, the cotton seed, like the lint, becomes the property of the LMD. Seed necessary for planting is sent to a dressing station at which it is chemically treated and then it is distributed to farmers by the Ministry of Agriculture. All the other seed is milled at LMB-owned mills, producing cotton-seed oil and cotton-seed cake. Both these procedures require that the seed is transported in 'gunny' bags. In many cases these became unobtainable and the seed was stored loose for considerable periods before being transferred from the ginnery.

99. The effects of the liberation war were, in every case, to exacerbate the existing problems of the ginneries. Almost all their usable vehicles were taken either by Amin's or the Tanzanian troops and then their buildings were looted by the neighbouring citizens. In several cases the ginneries were completely destroyed, others had their gunny bags stolen - often this entailed emptying their contents over the ground. Baled lint was in several cases taken and in one case sold by troops for mattress stuffing. As a result some unions now face considerable losses because the LMB has refused to pay for the lint so lost even though it was their property. We estimate that total losses incurred by ginneries due to the war may well be in excess of Shs. 75m.

100. The loss of vehicles has further exacerbated the transport problem so that several ginneries have excessively large holdings of baled lint. In some cases it is subject to deterioration under the effects of the weather. This situation has been made worse in the Gulu-Lira area. No trains have been through or beyond there since March.

THE TASK AHEAD

101. Unlike the case with coffee, the producer prices paid for cotton at current official rates of exchange would seem to leave no margin for increases unless some form of subsidy is paid. Indeed, even now a subsidy is paid to farmers by both the LMB and the ginneries. The latter are running at a loss though in no position to do so, whilst the former is a direct charge on the Government budget. The rehabilitation of the industry will require an adjustment in relative prices. Possibly even more immediately, it is essential that the cotton cooperatives are financially rehabilitated. Because of the policies of Amin's government they were required to buy at unrealistic prices. As a result they are in arrears on their crop accounts by some Shs. 200m. In a normal production year they also require a like amount for cash crop advances. Their physical reconstruction also requires the expenditure of large sums as war damage must be repaid and machinery modernised.

POLICIES AND RESOURCES REQUIRED

102. The ginnery rehabilitation programme started in 1978 has been static for the past year and a half but when completed it will enable a crop of 450,000 bales to be handled comfortably or 600,000 bales over a full year of ginning. Almost all the ginning equipment has been bought and much of it is already on site or en route from Mombasa. The project is being held up by the urgent need for 2,000 tonnes of cement and probably 500 tonnes of mild steel which is required within the 1979/80 financial year. In addition to this the re-equipping of existing ginneries will require, according to LMB estimates, Shs. 40m. for essential spares and bagging and bailing equipment and a further Shs. 8.5m. for scales and other equipment.

103. Less than three-quarters of the area planted to cotton in 1978 has been set aside for cotton this year. Thus it is likely that the crop will total some 40,000 bales. It is, however, reasonable to expect 150,000 and 400,000 bales in the 1980/81 and 1981/82 seasons. To achieve these levels of production will, however, require the provision of considerable inputs.

104. First it is essential that agricultural extension in the cotton growing areas be re-activated. There is an adequate supply of staff at a supervisory level but they require transport, equipment and chemical inputs. Further it is essential that a special task-force be established to spray cotton. Over the next two years the costs of such an extension campaign are estimated as follows:

Table 4.10
Costs of Agricultural Extension for Cotton Production

	1979/80		1980/81	
	Shs. m.		Shs.m.	
	Total	F.E	Total	F.E
Trucks and landrovers	1.9	1.9	0.8	0.8
Motorcycles and bicycles	0.9	1.9	0.2	0.2
Demonstration sets	0.4	0.4	-	-
Spray pumps	0.3	0.3	0.1	0.1
TOTAL	3.5	3.5	1.1	1.1

105. Costs associated with the actual planting, spraying and ginning of the cotton crop are estimated as follows:

Table 4.11
Costs of Cotton Crop Production by Small-Scale Farmers

	1979/80		1980/81	
	Shs. m.		Shs. m.	
	Total	F.E	Total	F.E
DDT	6.0	6.0	16.0	16.0
Ginnery spares, etc.	15.0	13.0	15.0	13.0
Baling materials	5.4	5.0	24.0	22.0
Superphosphate	2.0	0.5	3.0	1.3
TOTAL	28.4	24.5	58.0	52.3

Note: These estimates do not include the costs of ginnery lorries which are included in a consolidated estimate for the cooperative movement's transport requirements in Paper 18.

5. OTHER EXPORT CROPS

106. Two projects producing cashew and cocoa have been drawn to our attention. We support them both. The first involves the construction of a factory to process raw cashew nuts and the other the improvement of field practices and the fermenting of cocoa.

107. Cashews are planted only on small scale farms in the Eastern and Northern Regions. As yet they have not been produced in commercial quantities. The programme has been assisted by UNDP/FAO. The new proposal requires expenditure over two years of Shs. 1.9m. The project would also require an FAO consultant for a short period to evaluate progress to date and the provision of two training fellowships.

108. Cocoa production was 290 tonnes in 1978 and it is expected to reach 600 tonnes by 1980. Growers at present receive Shs. 3.20 per kg. wet beans or Shs. 0.40 per kg. of pods. The export price of dry cocoa beans have averaged £1,200 per tonne at Mombasa. This gives a marketing margin of approximately Shs. 12 per kg. dry cocoa beans compared with the equivalent grower price of Shs. 6, i.e. a margin of 67%. This is excessive and must be reduced if the crop is to expand to its potential level.

109. The proposed programme would require the expenditure of Shs. 2.1m. in 1979/80 and Shs. 4.2m. in 1980/81. Approximately two thirds in each year requires foreign exchange. It is proposed that some technical assistance and several short-term fellowships be provided.

110. A project has also been initiated for the irrigation of citrus at Ondina. This would involve the expenditure of Shs. 1.3m. in 1979/80 and Shs. 2.6m. in 1980/81. Most of this is required for the provision of necessary transport facilities, the repair of irrigation pumps and other equipment.

Estimated Input Costs For The Proposed Tea Industry
Reconstruction Programme

1. 1979/80 and 1980/81 Input Requirements

(a) Packing Materials	No.	Unit Cost (Shs.)	Total Cost (Shs.)	FE %
Tea chests	240,000	66.7	16.0	100
Gunny bags	200,000	16.5	3.2	80
Polythene liners	200,000	9.0	1.8	100
(b) <u>Transport</u> ¹				
Leaf collection tractor-trailer sets (say M.F.165s)	150	120,000	18.0	10
Lorries for made tea delivery to KLA - (say 10 tonners)	40	160,000	6.7	100
Management vehicles (pick-ups LRS)	60	75,000	4.5	100
Buses (UTGC)	2	200,000	0.4	100
Motor cycles (UTGC)	40	4,000	0.2	100
Water bowzers (UTGC)	10	200,000	2.0	100
Bicycles (UTGC)	250	700	0.2	100
(c) <u>Production Inputs (recurrent)</u>				
Fertiliser: Compound (tonne)	n a	1,500)		
Herbicides: Gramoxone (litre	n a	60)	10.0 ²	100
Dalapon (kg.)	n a	30)		
(d) <u>Other Production Inputs (Capital)</u>				
Potash	n a	n a	1.5	100
Knives, bags, pumps etc.	n a	n a	2.5	100
(e) <u>Factory Spares and other Replacements</u>				
UTA (33 factories) (no details given)			(77.0)	(100)
UTGC (11 factories) (full details supplied)			(65.0)	(100)
Estimated requirement			100.0	100
(f) <u>Tea Factories/Small-holder Tea Project</u> ³				
(completion) (ADB/UTGC)				
3 factories)				
25 km. tea roads)				
vehicles & road maintenance) unit			66.3	73
New godown at Kasese			5.4	30

¹ This is not covered in the cooperative movement's transport requirements.

² Shs. 4m. for estate acreage (10.5m ha.) as requested by UTA:
Shs. 6m. (out of Shs. 8.575m. requested by UTGC) for the small-holder sector (9.5m ha.).

³ Costed at 1975/76 prices; 25% of the project has been completed but the full original estimate has been entered to allow for inflationary effects on the remaining work.

ANNEX 4.1
(Cont.)

(g) <u>Production Credit</u>	No.	Unit Cost (Shs.)	Total Cost (Shs.)	FE %
Small-holders rehabilitation of abandoned tea (UTGC)			(10.0)	0
(h) <u>Office, etc. Equipment</u>				
Urgent office equipment			1.0	100
Weighing scales (UTGC) (details supplied)			0.5	100

2. Summary:

Capital Items:	1979/80	(b), (d), (e) (f), (g), (h):	Shs. 118.2m.
	1980/81	(b), (e) :	Shs. 101.7m.
Recurrent Items:	1979/80	(a), (c) :	Shs. 31.1m.
	1980/81	(a), (c) :	Shs. 31.1m.

Note: The capital items are phased over the two years of the reconstruction programme with the exception of items (d), (g) and (h).

IMPORT SUBSTITUTING PRODUCTS

D.G. Belshaw and W.R. Stent

1. SUGAR AND JAGGERY¹

ROOTS OF CURRENT PROBLEMS

Background Information

Sugar production was at its peak in Uganda in 1968 when 152,418 tonnes were produced but since then the industry has dramatically decreased. In 1974 total production was 40,033 tonnes. Exports reached their maximum in 1969 when 47,876 tonnes were exported but within a year they halved and since 1972 none has been exported. In fact since 1971 Uganda has been a net importer of large amounts of sugar to meet local demand.

2. There were three mills by - the late 1960s - Sango Bay, Lugazi and Kakira with total capacity of 170,000 tonnes. Sango Bay closed in 1973. A new mill with 45,000 tonnes capacity was opened by National Sugar Works at Kinyala in 1976. This brought total capacity to 195,000 tonnes. Cane is not only used to produce sugar in mills. Many small-holders sell their cane to mills which make jaggery, a crude brown sugar, which may be used instead of refined sugar, or as the base for the distillation of enguli which can be consumed raw, or can be sold for further refining at the waragi distillery in Kampala (See Paper 11).

3. Demand and consumption of sugar has risen with population growth and changes in consumption patterns that come with modernisation. On a per capita basis consumption rose from 12.4 kg. in 1968 to 14.9 kg. in 1969. It dropped to 13.6 kg. per capita in 1970, picked up somewhat in 1971, only to fall to 13.8 kg. in 1972. Since then no statistics of consumption are available but it is probable that it fell further because of shortages and inflation.

4. Sugar mills have traditionally been supplied with sugar cane by their own plantations and outgrowers. The total area available to the plantations for cane is 65,000 acres which at 77 tonnes per acre should provide 5.0m. tonnes of sugar cane to the mills. In 1977 the plantations had 46,900 acres under cane, i.e. 72% of all the acreage available for cane, but this statistic is misleading unless it is read together with statistics that indicate the quality of the cane. Sugar cane is at its best and ideal for cutting at between 18 and 20 months of age. Beyond 22 months, yields begin to be materially affected and because of its hardness and dryness it begins gradually to damage parts of the mill. At Lugazi and Kakira close to a quarter of the cane is 4th and 8th ratoon and over half is older than 22 months. In fact, some areas under cane are already developing into bush and forest. They have not been touched for over 72 months. Kinyala was planned eventually to have 25,000 acres under cane and to commence operation in 1975. In the event only 10,000 acres have been planted and of this nearly 70% has reverted to bush.

5. In 1970 outgrowers supplied 220,000 tonnes of cane to the mills but by 1973 they supplied only 49,600 tonnes; and in 1979 they are supplying none. At Kakira some outgrowers have established jaggery mills and have purchased cane from the plantation for processing.

6. The three operating plants have a nominal capacity of 195,000 tonnes of sugar but in 1977 Lugazi was operating at 7% of capacity, Kakira at 28% and Kinyala at 30%. Lugazi is an old plant, whose lay-out and design, in the opinion of UNIDO experts who visited it in April 1976, is of 'the late 1920s and since then extensions have been made on an ad hoc basis'. They went on to say that 'in the team's opinion, this plant is in a highly dangerous condition and the likelihood of a boiler explosion is now very real'.

¹This and the following two sections were written in association with Mr. S. Montsi.

In fact, there is a multitude of problems at this mill. The engines cannot give adequate power, insulation on pipes and boilers is leaking, boiler performance is low, brick-work on low-pressure boilers is dilapidated, plates are wearing dangerously thin, rotary vacuum filters are unserviceable, the power plant is giving problems, factory floors are badly worn out and are hazardous and the roof leaks badly. According to the UNIDO team of experts 'the question is no longer about the extent of rehabilitation but, in our view, it is when should the plant be closed for complete reconstruction'.

7. Since 1971 the operation at Lugazi has been losing money. But the then owners were sufficiently diversified in more profitable areas to absorb the losses. Since the owners left Uganda in 1972 the factory's operations have experienced a sharp decline in output and a dramatic increase in losses. In 1977 the loss was Shs. 43m. or Shs.10,488 per tonne produced. In 1978 it was Shs. 43m. (Shs. 44,565 per tonne produced). The operations have depended heavily on government support and bank loans and overdrafts, and at present levels of operation the factory will continue to sink deeper into debt.

8. Kakira was also in bad shape until a contract was signed with an Italian firm for the factory's rehabilitation. The US \$29m. contract will rehabilitate about two thirds of the essential parts of the factory so that it can operate at approximately 70% of rated capacity. Work is progressing albeit slowly but the contract does not provide for a stock of essential spare parts nor for some other materials necessary for the workshops. Neither does the contract cover the rehabilitation of the plantation which in its present state cannot support a mill of more than 12,000 tonnes capacity. Both the transport and the workshops at the mill and plantation are in a bad state of repair and need replacements but these are not covered by the contract. It is also silent on the management and other key personnel required for efficient running of the mill and plantation.

9. Kinyala Sugar Works was completed under a contract with Messrs. Walchandnagar of India (WIL), and commissioned in 1976 with a rated capacity of 45,000 tonnes. The target year for completion and commissioning was 1972 but, due to a variety of problems, this could not be achieved. However, programming and preparations for the opening of the plantation were not changed so that the planted cane overmatured, and much reverted to bush. It was planned that 4,000 acres would be planted by outgrowers but only 700 acres materialised. Most of the original outgrowers in the scheme abandoned it before 1976 when it became obvious that they could not sell their cane. A further problem facing this factory is that a number of works remain incomplete e.g. fencing the water pumping station, building waterproof side walls, flooring the cane yard, security fencing, factory laboratory, labour camps and senior staff housing, etc. Like Lugazi and Kakira the operations are run at very low capacity, i.e. 30%.

Problems Facing the Industry

10. Management problems have been experienced in the industry since 1973 when government took over. The original owners had clear management structures and they also had people with some basic training and extensive experience in the key management and technical positions in the industry. Unfortunately, Ugandan Africans rarely held these positions. Under the new operators not only were management structures not clear but people with no experience at all were put in management and other key positions in the industry. This naturally led to inefficiencies and demoralisation of personnel in the whole industry.

11. Chronic shortages of labour have been experienced in the plantations since 1973. Sugar cane production has always been labour intensive in Uganda. For full production Kakira requires over 6,000 men and Lugazi over 5,600 but in 1979 they each had less than 1,000. This has led to the failure to cut the majority of cane available at the right time. The shortage of labour is due to:

- The withdrawal of migrant labour from Rwanda, Burundi and Zaire for economic and political reasons. Inflation in Uganda rendered their pay worthless and while some of the migrants returned home others branched into magendo. This led to their banning by the Government.
- Wages in the plantations were not attractive in an inflationary economy. The present level of Shs. 253 per month is well below that needed to cover

essential commodities. In the past there were fringe benefits such as rations of food and sugar, free medical treatment, subsidised primary school facilities, scholarship schemes and transport within the plantation but in most cases these were discontinued after 1973. Wages paid by outgrowers who sell to jaggery factories now stand at Shs. 350 per month.

- Recruiting schemes whereby recruiting agents and chiefs were paid a fee for every labourer they provided to the plantation were dropped. Instead, monthly paid recruitment officers were hired and thus the incentive to bring more labour no longer exists.
- Bad management and general deterioration in day-to-day operations demoralised labour. Recently cases of non-payment of wages for about three months have been reported at Lugazi.

12. Financial and foreign exchange problems have made it impossible to repair or replace old ploughs, transport, loading, and other equipment at the plantations and the factories. Most of the vehicles and other equipment inherited were old and obsolete and failure to obtain the necessary parts for them has meant that most have had to be abandoned. As a result serious problems are being experienced in the transportation of sugar from the plantation to the mill both at Lugazi and Kakira. However, even if plantations had worked smoothly not all cane would have been milled because of problems of mill capacity and their constant break-downs.

THE TASK AHEAD

13. Ugandans consider that white, or at least mill-white, sugar is an important item in their diet and its availability at a low price will help reduce those forces leading to higher wages. In addition, Uganda has the potential not only for achieving self-sufficiency in the production of mill sugar but of becoming an exporter. The export market for sugar is, of course, a notoriously risky one and in the first instance it would seem appropriate only to seek to achieve self-sufficiency. That goal will not, however, be rapidly achieved. Until it is, we recommend that adequate funds be set aside for imports.

14. The successful and economic production of sugar requires that the entire process from the cultivation of cane to the disposal of the refined product and by-products be run as a fully integrated process. Central to this, of course, is the mill, which - if it is to be run economically - must operate continuously, utilising a high proportion of its rated capacity. Milled cane should be fresh and in good condition. The by-products of milling - molasses and bagasse - are themselves valuable. The former may be used as the basis for the production of ethanol and the latter is able, providing the mill is run at a sufficient level, not only to provide fuel for the mill but also to provide the raw materials for cardboard or related products. It is obvious, therefore, that an adequate supply of cane must continuously be available throughout the milling season, which in Uganda can continue throughout the year. This requires forward planning so that areas of cane to be cut and transported to the mill are specified long in advance. The mill must be well maintained, of course, to exploit the year-round production pattern on the plantation side.

15. An adequate supply of essential spare parts for both field and mill machinery must always be on hand. The potential rewards for successfully integrating the entire production process are great, but the costs of failure to do so, as has happened in Uganda, can be enormous. It must further be added that the cost of rehabilitation, once the production process has been disrupted are also considerable.

POLICIES AND RESOURCES REQUIRED

16. Each of the three operating units, that is the three factories and their surrounding cane, faces different but related problems. It is our view that each requires a fully integrated rehabilitation and development programme which can only be drawn up after detailed and careful analysis. It is, of course, not possible for these to be given here and we therefore recommend that the Government, as a matter of priority, commission a set of such analyses. We should, however, wish to add some words of caution. It is

essential that the rehabilitation and development programmes be drawn up only by consultants who are capable of looking at the entire process, from cultivation to milling. Too often the Ugandan industry has suffered from the advice of not necessarily disinterested parties who have focused on a single apparent constraint with the result that, despite the expenditure of considerable resources, little improvement has taken place.

17. It should further be added that the consultants be given clear guidelines as to what government policy is in regard to each operating unit. This is especially so with respect to outgrowers. We believe that there are good reasons, both sociological and economic, why a large number of outgrowers should be associated with each mill, but this requires that they be adequately incorporated into the overall management strategy of the production unit. Thus, not only should they be supplied with planting material and chemical inputs, but also their deliveries of cane to the mill should be according to a systematic schedule.

18. The desired proportion of cane from the estate and outgrowers should be specified to the consultants and, if outgrowers are to be employed, government should specify how they are to be organised and what will be the responsibilities of the mill and government with respect to agricultural extension services for them. In this regard it may be added that a successful sugar unit should be well capable of financing satisfactory extension and management services for outgrowers. It is essential, however, that safeguards be established to prevent the central mill management from imposing unfair prices upon outgrowers.

19. It will be necessary, too, for government to decide within broad limits how much the sugar industry is to depend on hand labour in the estate fields. It is our view that the labour shortage presently being experienced by the sugar industry is temporary and that it will disappear as a result of the adoption of the policies recommended elsewhere in this report. Accordingly we consider that it will be appropriate to use cane-harvesting machinery only as a supplement to field labour at times of peak seasonal demand. The consultants should be invited to comment on the appropriate labour - machine mix for each production unit.

20. A further essential decision to be made by government, prior to obtaining consultants for the various projects, is the method of management and ownership of the production units it wishes to adopt. Large, internationally recognised and competent firms may be willing to enter into some form of management/ownership relationship with the Government in one or more of the sugar projects. We recommend that the Government seriously consider such possibilities, noting that through such arrangements the necessary immediate needs of foreign exchange for the rehabilitation of the sugar industry may be more readily obtained than would otherwise be the case.

21. Each of the production units has a different, but related, set of problems - and their rehabilitation and development programmes accordingly will differ. We sketch these below.

Lugazi

22. A dilapidated but operating mill is associated with neglected cane planted over a wide area. It is debatable whether the entire plant should be closed down until a new mill can be built and the plantation re-established, or whether the mill be partly rehabilitated while plans are made to replace it. If the mill is closed, cane could be sold to jaggery factories. This policy would certainly lead to a short-term cash saving but it would also involve the dissipation of the present labour force, especially the technically competent middle management. If it is decided first to rehabilitate the mill it will be especially necessary to overhaul both the high and low pressure boilers and to purchase centrifuges (out of a total of 21 only 5 are running). This will be expensive; if possible, those that are bought should be compatible with the new mill. It would seem, therefore, that if the mill is to be rehabilitated, it should be supervised by the engineers commissioned to construct the new one.

23. The entire planted area needs to be rehabilitated. This requires that it be successively put under the plough. Heavy tractors and the associated machinery will be required for this. Replanting with existing cane varieties would be satisfactory in the first instance, but a start should be made, either at Lugazi, or elsewhere, on the

development and multiplication of improved varieties. In this regard it should be noted that the sugar industry as a whole, once rehabilitated, should be capable of financing its own agronomic and other research.

24. The entire cane transport system needs to be overhauled. Roads are in disrepair, cane handling cranes need replacing, and many prime-movers and 20-ton trailers need to be purchased. We recommend that, until the consultants' overall plan for Lugazi is obtained, the necessary spare parts be obtained for the vehicles and cranes and that possibly two graders be purchased. Once the pattern and method of development of the production unit is established it should be financed as a whole. It is essential that the entire project be seen as an integrated programme. If this is not done the rehabilitation will be an expensive failure.

Kakira

25. The mill at Kakira is currently being rehabilitated and it is anticipated that when completed it should be satisfactory. Emphasis there needs to be on the complete rehabilitation of the cane fields and transport system. It is recommended that a suitably qualified consultant, that is one who has had experience as a field manager of a sugar plantation in which considerable emphasis is also placed on outgrower production, be commissioned to draw up a suitable rehabilitation programme. Alternatively, instead of commissioning its own consultant, the Government might choose to enter into a management/ownership agreement with an international firm with specialised experience in the production of sugar from such units.

Kinyala

26. This sugar production scheme is in need of a total rehabilitation and development programme. The mill itself has a number of design defects and uncompleted work which should be checked by a suitably qualified engineer, independent of WIL with whom National Sugar Works Ltd. have had a management contract.

27. The major problem with Kinyala is to re-establish a satisfactory area of good quality cane. The present 3,000 acres of millable cane should be harvested as soon as possible and then re-planted. Simultaneously planting should commence on the estate and on outgrowers' holdings. As in the case of Lugazi and Kakira it is essential that a consistent overall development programme be drawn up by suitably qualified consultants. Special attention should be given to cane harvesting techniques. The heavy equipment which has been ordered, and 75% paid for, does not seem to be satisfactory for the harvesting of the entire crop. Further, as ordered, it is capable of cutting only 200 tonnes of cane per day whilst the mill has a capacity of 1,500 tonnes per day and requires 3,000 tonnes before a run can be commenced. It may be that the equipment should be used only to 'top up' the capacity of the field labour force.

28. Kinyala has provided a detailed list of their capital requirements. We counsel against the purchase of any equipment, other than necessary spare parts, until the consultants' report is received.

Small-holder Cane

29. The production of jaggery is a well established intermediate technology industry. We believe that it should be encouraged. One improvement which could be made is through the introduction of the open-pan sulphitation process which can operate at a level of production of 1,000 tonnes of sugar per year (i.e. it requires about 100 ha. of cane). We recommend the Government investigate the possibility of establishing a trial plant of this sort. Alternatively, foreign exchange could be made available to a private entrepreneur who wished to establish such a plant.

External Exchange Requirements

29. Because of our recommendations that no major action be commenced until the receipt of consultants' reports, or until management/ownership agreements are entered into, we are not providing detailed foreign exchange budgets.

31. Necessary spare parts etc. are likely to require Shs. 45.0m. (US \$6m.) in

1979/80 and possibly Shs. 4m. (US \$0.5) should be set aside for consultancy fees, etc. Requirements for 1980/81 will be dependent upon consultants' reports, etc.

2. TOBACCO

ROOTS OF CURRENT PROBLEMS

Background Information

32. The tobacco industry in Uganda was started by the British American Tobacco Company. Initially production was aimed at meeting the needs of its cigarette factory at Jinja but in 1968 Government decided to promote exports. By 1974 exports earned approximately Shs.15m.

33. Two types of tobacco are grown - fire cured and flue cured. The production of each is restricted to a separate area - fire cured in Bunyoro District and flue cured in West Nile, Acholi and Lango Districts.

34. Tobacco production reached a peak of 5m.kg. (3.2m. kg. flue-cured and 1.8m. kg. fire cured) in 1972. Since then production has dropped steadily, falling to an estimated 1.5m.kg. (1.2m. flue cured and 0.3m. fire cured) in 1978. No tobacco was exported in that year. Whilst the National Tobacco Corporation has estimated that production in 1979 will total 900,000 kg. that seems, as is discussed below, a gross exaggeration. Indeed, it appears probable that in order to meet the demands of Ugandan cigarette smokers, tobacco will need to be imported.

35. The National Tobacco Corporation, which was established in 1977, is responsible for the production and processing of tobacco. The Corporation is charged together with the Ministry of Agriculture with coordinating and assisting in the production of tobacco by small-holders.

a) Flue - Cured Tobacco

36. ¹Production of flue-cured tobacco is currently restricted to the mid-north of Uganda. Sowing of the crop in nurseries normally commences in January and seedlings are planted out from late March onwards. The crop is labour intensive and, unless yields are seriously to be affected, it is desirable to use both fertilisers and nematocides. For flue-curing it is essential, too, that adequately constructed curing barns, together with sound flue-pipes, be available. Considerable quantities of fire-wood are also required.

37. The prices paid to farmers are centrally determined according to a formula based on an estimated cost of production. Since 1972 they have become increasingly unsatisfactory to farmers and many have transferred to the production of the more profitable foodcrops. This has occurred even after land has been opened for tobacco. Farmers also found, because of the shortage of machine-made cigarettes in the area, that they could more profitably sell tobacco leaves direct to workers instead of to their primary societies. Others, because of the general shortage of consumer goods, felt that cash-crop production was just not worthwhile. Not only was the price considered unsatisfactory; there were often long delays before payment was actually made - some growers had to wait for up to 12 months. Until 1976 tobacco farmers were able to obtain some of their essential inputs on credit from their primary societies but since then credit has no longer been available.

38. The availability of purchased inputs, and especially of fertilisers, steadily decreased after 1972 and by 1978 none was available to farmers. Such items which actually reached the region were diverted by government officers. Fertiliser was

¹A very small amount is also produced in Northern Kigezi. There is no ecological reason preventing its production in most other parts of Uganda. Total area and location is controlled by the Tobacco Corporation and the Ministry of Agriculture.

resold in Kenya and galvanised iron was used for the construction of private houses.

39. Tobacco farmers have traditionally relied heavily on tractors for the initial opening of their land but as the number of operational tractors in the area decreased this became more difficult and costly and many farmers could no longer afford it. This problem was further exacerbated by the gross shortage of hand hoes. Hoes sent to the area were, on a ministerial directive, distributed by the Governor's Office instead of through the cooperatives and many were sold in Zaire. When locally available they cost, on the magendo market, anything up to Shs. 200, far too much for an ordinary farmer to pay.

40. The most serious shortage, however, was that of fuel. Eucalyptus plantations are, in many cases, a considerable distance from the tobacco farms and, in the absence of tractors, transport is very difficult. To this difficulty was added the problem of the burning out of many of the eucalyptus stands. Sometimes this was accidental but at other times, apparently, it has been deliberate - foresters who had not been paid set plantations on fire as an act of protest and frustration.

41. The liberation war itself has had a serious effect on the planting of flue-cured tobacco. In June the production areas were still disturbed and it seems likely that there will be no crop in 1979.

b) Fire - Cured Tobacco

42. Fire-cured tobacco is grown in Bunyoro district into which it was first introduced in 1927. It is entirely a small-holder crop, many of the farmers coming from West Nile, Kigezi and Acholi districts and also some from Zaire.

43. As was the case with flue-cured tobacco there was a steady decline in production after 1970. Yields, too, fell by almost two thirds to 155m. kg/ha. in 1978. This was due to a complex of factors, dominant amongst them being dissatisfaction with prices, which although they increased yearly, did not keep pace with the level of price rises occurring in the economy at large. For this reason farmers planted food crops rather than tobacco and, as with flue-cured tobacco, they often transferred to other crops after their land had been opened for tobacco. The high price of cigarettes also led to the development of a market for the illicit sale of cured leaf to smokers. Some such sales were made across the border with Zaire.

c) Processing

44. The Tobacco Corporation owns and operates a processing plant in Kampala and a cigarette making plant in Jinja. Both operations were soundly engineered and are well run. The capacity of the Kampala plant is 7m. kg. of tobacco per annum. This level of production has never been reached due to shortage of tobacco. The capacity of the cigarette manufacturing plant is 500,000 M. (1 M = 1,000 cigarettes) per month but short supplies of tobacco have reduced production to about 150,000 M per month. In 1970 monthly production averaged 128,000 M; this rose to 167,000 M in 1974 and fell to 123,000 M in 1977.

45. All production has been locally consumed except for 1970 and 1971 when some 33,000 M and 146,000 M cigarettes respectively were exported to Rwanda and the Sudan. Management believes that there is a large market in these countries which, conditions being right, could be exploited.

46. Cigarette making requires the importation of a large number of inputs including cigarette paper, cork tips, filters, inks, glues, metallic foil and other packaging. Assuming production at 75% rated capacity, these inputs would consume Shs. 2m. per month in foreign exchange, but of course, if production stopped, cigarettes would most certainly be imported, thus using foreign exchange but losing the important benefits of value added in the tobacco industry and employment.

47. The Corporation lost materials, equipment and vehicles to looters. Loss of vehicles has rendered it impossible for corporation staff to service tobacco growers adequately.

48. A problem facing the Company is old and obsolete machinery which, though presently in a fair state of repair, will sooner or later require replacement. This would cost Shs. 77m. The proposed renewal and expansion plans should be examined and, if found viable, overseas institutions could be approached for finance.

THE TASK AHEAD

49. We believe that the disruption due to the war in the growing areas is such that it is likely that very little tobacco, possibly no more than 500,000 kg. will be produced in 1979. The important task is rapidly to rehabilitate the extension service and to provide the necessary inputs so that the 1980 crop can be planted under good agronomic conditions. That crop could well be 3 m. kg. To achieve this will require the repair and rehabilitation of the curing barns and the provision of adequate transport and chemical inputs. Whilst we believe that, in general, Uganda should aim not to be dependent upon tractors for its small-holder farm production, we recognise that there are special circumstances for tobacco which justify their use - farmers have become dependent upon them for opening their lands and for flue-curing - they are essential to transport fire-wood. We counsel, however, that steps should immediately be taken to prevent the industry from continuing in its dependence on tractors. Trials and demonstrations with ox-drawn equipment should be undertaken with the view to having it replace tractors.

50. The prices available to tobacco growers have proved, from their point of view, most unsatisfactory. Indeed a recent analysis of cash-cropping by the Planning Unit of the Ministry of Agriculture showed tobacco to be the least profitable of all cash-cropping activities. If farmers are to be expected to sell it on official markets it is essential that the Corporation's prices be greatly increased.

51. The only major problem confronting the Corporation as far as processing is concerned is the supply of tobacco. This year it might have to import upward of 500,000 kg. but, potentially at least, Uganda could by 1980 once more be producing more than its own requirements.

POLICIES AND RESOURCES REQUIRED

52. From the production point of view the most important policy is that prices paid to farmers be increased. This can be achieved by a self-financing adjustment of official producers' prices and cigarette prices, both set by the National Tobacco Corporation.¹

53. The rehabilitation of the flue-cured industry will require that old barns be repaired and new ones built. A heavy input of fertilisers, etc. is also required for seedbed preparation and field use. Woodfuel plantations require to be extended and, as mentioned above, we believe that some tractors should be made available for hire. On the basis of data provided by the Tobacco Corporation we estimate the costs of these measures to be as follows:

¹ Cigarettes are currently sold at prices in the magendo market which are considerably above the official prices. In the situation we are recommending, part of this economic rent is captured in order to increase the cigarette supply and bring the rent to successively lower levels.

Table 5.1
Cost of Rehabilitating The Flue-Cured Tobacco Industry,
1979/80 - 1980/81

	1979/80 Shs. m.		1980/81 Shs. m.	
	Total	F.E	Total	F.E
Tractors	15.0	15.0	3.0	3.0
Seedbed preparation	1.0	0.5	1.0	0.5
Vehicles (staff)	6.0	6.0	4.0	4.0
Transport vehicles	7.0	7.0	4.0	7.0
Field operations (fertilisers etc.)	11.4	8.0	15.0	10.0
Barn construction & rehabilitation	8.0	5.0	4.0	2.5
Establishment of woodfuel plantations	1.0	-	1.0	-
Construction of baling centres	3.0	-	4.0	-
	52.4	41.5	36.0	27.0

54. It is further recommended that steps be taken in 1980/81 to establish at a later date a research centre to specialise on the problems of the tobacco industry. We suggest that Shs. 0.05m. be set aside in 1980/81 to obtain an expert in this area.

55. If the processing of tobacco is to proceed satisfactorily it may be necessary to import leaf as well as the usual inputs in 1979/80. We estimate that this might require Shs. 4m. which together with the normal imported inputs will cost Shs. 28m. in 1979/80. In 1980/81 only Shs. 24m. should be required for imports (see Paper 8).

56. The National Tobacco Corporation is eventually due to take over the entire responsibility for extension and marketing of farmers' crops. This will require the transfer of some of the existing staff from the Ministry of Agriculture but should not require additional manpower.

3. LIVESTOCK PRODUCTS

ROOTS OF CURRENT PROBLEMS

Background Information

57. In Uganda meat and milk are important items in the consumption pattern and their prices have an important effect on the cost of living.

58. In Uganda livestock is kept both for subsistence and commercial purposes. Whilst the majority of animals remains in the small-scale sector, the number of cattle on ranches comprises nearly 6% of the total. The number of ranches increased rapidly, to 148, in 1970 and under Amin continued to rise, reaching 329 in 1974. The number of cattle on ranches did not, however, increase at the same rate. A similar situation existed for fenced dairy farms, which increased from 1,400 in 1970 to 3,030 in 1974, but whilst the herd increased from 56,000 in 1970 to 152,000 in 1973, in the next year it fell to 77,000.¹

59. Both trypanosomiasis and East Coast Fever are enzootic in Uganda and seriously affect production. The former is carried by the tsetse fly and the latter by the cattle tick. Thus their control requires the local eradication of tsetse fly and the maintenance

¹ Later figures are not available.

of a regular dipping programme. Other diseases which occasionally occur are rinderpest, contagious bovine pleuropneumonia and foot and mouth disease. Their control requires good management, the provision of vaccines and the possibility of enforcing quarantine.

60. The indigenous cattle, though hardy, are poor producers and various efforts have been made to upgrade them through the introduction of new blood. Whilst such animals are more productive they are susceptible to disease and require a high general level of husbandry. Unfortunately, since 1972 this has become increasingly difficult. Shortages of foreign exchange restricted the availability of drugs, vaccines and dipping materials. Many cattle dips fell into disrepair from lack of cement and timber. Veterinarians became increasingly restricted in their movements due to lack of transport and the supply of basic equipment, such as syringes, became inadequate.

61. In the late 1960s a network of milk collection centres was established under Dairy Corporation and cooperative ownership. At its peak there were 81 active centres equipped with refrigerated cooling vans. Eight refrigerated tankers took the milk to central dairies of Mbale and Kampala. Whole milk collection, though it never approached the installed capacity of the dairies, reached a peak of 19.5 m. litres in 1972. Since then it has fallen effectively to zero, principally because the price offered to farmers was inadequate. Until 1977 the Corporation paid Shs. 1.60 per litre but it was then increased to Shs. 3, paid monthly. When milk was available to the Corporation, it sold it first to hospitals and schools and then to urban households at Shs. 2.20 and later Shs. 5 per litre. Such a price differential is apparently satisfactory in a locally saturated market, in which case farmers are apparently happy to deliver their milk to the centre rather than hawk it around at a higher price. Generally, however, the demand for whole milk has by no means been saturated in which case the free market price has been greatly in excess of the 'official price'. Indeed, prices have reached in excess of Shs. 20 per litre, and commonly have been from Shs. 8 to Shs. 10 in urban areas. Under such circumstances it has been far more profitable for farmers to sell their milk direct to the public.

62. Supplementary feedstuffs became increasingly difficult to obtain over the period of the economic war, and farmers who managed to buy them often had to pay up to Shs. 1,000 per tonne for cotton seed cake. Rice bran has been as high as Shs. 2,400 per tonne. Obtaining feedstuffs, at any price, was also made difficult by the increasing lack of rural transport as lorries and tractors fell into disrepair. As a result many farmers have ceased to use concentrates and yields have further declined.

63. Whole milk collection was also hampered by poor transport facilities. No milk churns have been imported since 1973 so that many farmers have not had the means of carrying the milk. The shortage of bicycles on which the churns can easily be carried has added to this transport problem, as has the shortage of pick-ups and lorries. Once the milk reaches the collection station it must be transported to the central dairy where, again, the absence of adequate transport has proved crippling. The Corporation initially had a fleet of 8 milk collection tankers of 8,000 litres capacity but by 1977 none was operational.

64. The dairies themselves were not badly affected by inadequate machinery, but they had troubles with spare parts. More serious was the shortage of labour. However, the liberation war and its associated looting resulted in the dairies being made inoperable. Extensive repairs and replacement of equipment, with the exception of office furnishings and motor vehicles do not, however, seem to be necessary.

65. Since the commencement of the 'economic war', commercial poultry farming has declined. Hens kept under intensive conditions require an adequate diet of concentrated feedstuffs. These may be produced on the farm or purchased. The former case requires that the unit be dependent either on a relatively large labour force or be mechanised. Neither of these options was possible over the period under review. The wages which poultry growers were capable of paying even when they sold their eggs well above the official price were inadequate to attract sufficient labour and the maintenance of tractors etc., became increasingly difficult. Being dependent upon purchased feedstuffs became increasingly risky and expensive, with the result that in many instances birds went off the lay entirely or even died. In 1972, there was a peak of 8,981 production units with nearly three million birds, but within two years these had fallen to 1,785 units with nearly 400,000 birds. It has continued to decline since then. As a result of the liberation war the entire breeding stock at the Ministry of Animal Resources' poultry

unit has been lost. This stock was used as the source for commercial farmers productive stock (both layers and broilers).

THE TASK AHEAD

66. The major task ahead is to reduce the price of meat and milk. This requires that animal products be increased through the most rapidly applicable of measures. Milk prices will best be reduced through the provision to the mass market of reconstituted milk leaving the fresh whole milk for those who are willing and able to pay the market price for it. On both markets supplies should be increased to bring prices to more acceptable levels.

POLICIES AND RESOURCES REQUIRED

67. It is essential that animal health be maintained and improved. This requires the immediate re-introduction of tick, reinderpest and foot and mouth disease control. This requires that the cattle dips throughout the country be rehabilitated over the next two years and that necessary drugs and vaccines be imported. Sets of veterinary instruments are also required. It is also essential that field staff of the Ministry of Animal Resources once more become mobile. Diagnostic laboratory facilities throughout Uganda have fallen into disrepair. We suggest that four such laboratories be established in the next two years.

68. Whole milk is a most nutritious food but unless taken fresh from cows grazed on grass it is universally very expensive. Milk reconstituted from dried skimmed milk (DSM) and vegetable or animal oils is equally nutritious but, given the world surplus of DSM due to the widespread policy of subsidising dairy farmers throughout the 'developed world', it can be manufactured for a fraction of the cost of fresh whole milk delivered to urban areas. If policy is to provide a nutritious food at a low cost in urban areas, there seem to be few grounds for continuing with the proposed 'Dairy Development Scheme'. Under this, DSM and butter oil will be imported for a period of five years under the World Food Programme while at the same time the Government provides counterpart foreign exchange funds to recondition the physical equipment required for the collection and central processing of whole milk.

69. A second possible reason for the encouragement of the dairy industry might be that it is a means of providing an additional income for farmers and through them the rural area as a whole. This has a certain appeal but it must be emphasised that dairy farmers are by no means the most needy of farmers and that they already have the possibility of achieving good incomes through the direct sale of their whole milk.

70. Our recommendation is that the Dairy Corporation withdraw from the whole milk market altogether and that it concentrate on producing and distributing through licensed retailers reconstituted milk in urban areas. Accordingly we recommend that the Corporation divest itself of all its equipment associated with the collection of whole milk. Dairy farmers should be free to sell their milk direct to the public or, if they choose, through cooperatives which could take over existing collection units. Considerable premia are payable in Uganda for fresh whole milk and we do not believe that our proposals need reduce dairy farm income, nor would they reduce the incentive for the industry to expand. We suggest that as whole milk production increases in response to market prices, a series of small dairies be established at regional centres. These could be operated by private individuals or groups of farmers organised as cooperatives.

71. Njeru dairy farm near Jinja could well provide a basis for the first such dairy. It is basically a well established farm, with a very well equipped dairy parlour. However, both farm and dairy equipment have fallen into a considerable state of disrepair. Pastures need rehabilitation and present transport facilities are inadequate. With little additional building it could provide a satisfactory base for extension work first amongst neighbouring dairy farmers and later to farmers further afield. We recommend also that a diagnostic laboratory be built at Njeru. This programme would require the appointment of three additional Animal Husbandry Officers and two Veterinary Officers, and also a Technician to maintain the plant.

72. The Ministry of Animal Resources' poultry hatchery requires complete restocking. This can most rapidly be done by importing adult birds. Simultaneously, day-old chicks should be imported. Until the feedmill at Jinja is in satisfactory production it will be necessary to import feedstuffs. We suggest that an overseas expert be made available on a twelve-month appointment to assist in the rehabilitation of the hatchery.

73. The quality of dairy cattle needs upgrading. We believe that this can most economically be done through the re-establishment of the Artificial Insemination Unit. This unit would be greatly assisted by the appointment of three overseas experts, possibly from a UN agency. In the meantime we recommend that two high quality bulls be imported. Pig quality too has degenerated. In this case it will be necessary for the Ministry to import an entirely new breeding herd. We suggest that five centres, each with two boars and 20 breeding sows be established.

74. We estimate that the cost of the rehabilitation programme including the provision of DSM for the reconstituted milk programme, is as follows:

Table 5.2

Costs of The Livestock Rehabilitation Programme,
1979/80 - 1980/81

	1979/80 Shs. m.		1980/81 Shs. m.	
	Total	F.E	Total	F.E
Staff vehicles	2.0	2.0	3.0	3.0
Motorcycles & bicycles	1.6	1.6	1.6	1.6
Lorries	2.5	2.5	5.0	5.0
Dairy spare parts, churns, etc.	0.5	0.3	0.5	0.3
Drugs, vaccines, etc.	75.0	60.0	100.0	80.0
Poultry product stock	0.5	0.5	-	-
Feedstuff for poultry	0.5	0.3	0.5	-
Bulls	0.3	0.3	-	-
Pig breeding stock	0.3	0.3	-	-
Diagnostic laboratories	0.2	0.1	0.4	0.2
Barbed wire, etc. ¹	6.0	6.0	8.0	8.0
DSM	50.0	50.0	50.0	50.0
Experts for A I and Hatchery	0.5	0.3	2.0	2.0
A I Centre	0.5	0.3	0.2	0.1
Private import of breeding stock etc. ¹	3.0	3.0	2.0	2.0
	143.4	127.5	173.2	152.2

Note: ¹ These items require an allocation of foreign exchange by the central bank to private importers.

4. OTHER IMPORT SUBSTITUTING PRODUCTS

75. Wheat, barley and kenaf production projects were set up by the Amin regime with assistance from the Saudi Arabian Government. The recently reconstituted Ministry of Animal Resources, whose responsibility these are, has been unable to provide any details. We recommend that responsibility for these projects is transferred to the logical body, the Ministry of Agriculture, and that an early appraisal is made by its Planning Unit of the economic benefits to be obtained from continuing, modifying or discontinuing them.

STAPLE FOODCROPS AND OILSEEDS

D.G.R. Belshaw and W.R. Stent

ROOTS OF CURRENT PROBLEMS

Background Information

(a) Foodcrops

A wide diversity of foodcrops is grown in Uganda. In different regions different crops predominate; for instance, bananas form the staple in the high rainfall areas of the south whilst cereals become more important in the north. Some food crops such as bananas, cassava, sweet potato and various lentils are produced primarily for local, i.e. on-farm or rural, consumption, whilst others, such as maize, groundnuts, Irish potatoes and rice, are for export from the area of their production.

2. The effect of the economic war on the various food crops differed from area to area. Basically there were two conflicting sets of forces at work: one led to the increase in the area under a particular crop whilst the other reduced it. In the former case, a rise in the price of the food crop relative to traditional export crops led to resources, especially labour, but also land, being transferred to the production of food crops. This trend was reinforced as purchased foodstuffs became increasingly scarce. It should be noted, however, that 'farm-gate' prices of food crops did not rise uniformly throughout Uganda. This was due first to the increasing deterioration of all forms of road transport and secondly to the increased harassment of traders by Amin's troops. In the latter case the carriage of goods at night became impossible and during the day traders ran the risk, at the best of being forced to sell their produce below cost, or worse, of having their load, and also possibly their lorry, confiscated.

3. Against the forces working towards an expansion in foodcrop production were those which led many farmers to retreat further into subsistence production (that is, simply to maintain production at a level necessary to meet the food requirements of their own household). These forces were complex but possibly principal amongst them was the shortage of consumer goods, and especially the basic necessities - soap, sugar, salt, etc. As the economic war proceeded these became increasingly expensive at magendo prices and consequently out of reach of small farmers. Purchased agricultural tools, such as hoes and ox ploughs, also became difficult, if not impossible, to obtain, and so for many farmers both the incentive and the ability to increase output were absent. Between 1970 and 1978 the overall area under foodcrops probably increased by about 14% (i.e. 4.5% per annum). In contrast, the area under groundnuts fell by 32% and finger millet by 7%. One worrying aspect of the changes which have taken place in the area under the different foodcrops is the fact that the cultivation of cassava, a crop with a low nutrient content is increasing, apparently at the expense of the more nutritious grain crops, finger millet and sorghum.

4. There are in Uganda several areas which are likely to suffer a food deficit. The capacity of the nation, as a whole, to meet these deficits is dependent not only upon its total foodcrop production but also on its distributive network. Clearly, this has deteriorated greatly under the effects both of the economic and the liberation wars. It is most unfortunate, then, that it is reported that in Teso District there is likely to be a 60% deficit in food between October and January next due to poor rains and an outbreak of cassava mite. In Acholi due to the disruption of the liberation war, farmers did not plant as much as usual and this has been compounded by the rains being late. The District Commissioner has estimated, at the end of this year, there will be an 80% deficit in East Acholi and a 60% gain in West Acholi. Normally in such circumstances Acholi is able to obtain ample supplies of food from the neighbouring Lango area but this year that may not be possible because of the shortage of road transport. Another compounding factor is the purchase of food in the north of Juba. In this case, as always, the maldistribution of food during times of famine is increased by the 'free market' mechanism.

(b) Oilseeds

5. The major oilseed crops, excluding cottonseed, are groundnuts and sim-sim (sesame) and the minor ones are soya bean and sunflower. The main groundnut producing districts are Teso, Busoga and Bukedi whilst sim-sim is grown mainly in the Northern Region and north Bunyoro District. Soya beans do best in the wetter areas of the Lake Victoria crescent whilst sunflower is mainly restricted to Sebei, West Nile and Acholi Districts.

6. Various projects for increasing the production of oilseeds have been proposed since the early 1960s but none has been effective and, as mentioned above, groundnut production has actually fallen. As a result Uganda remains a net importer of oilseeds.

OUTSTANDING NEEDS

7. There are two aspects of food crop production which require attention. First there is the need for rehabilitating farmers' productive capacity through the supply of adequate inputs, and second there is the need to make special provision for possible food deficit areas. Oilseeds offer good prospects for increasing farmers' cash incomes as well as improving the people's diet. Production of vegetable oil also provides valuable animal feedcakes as a by-product.

POLICIES AND RESOURCES REQUIRED

8. Over the period 1972-78 an extreme shortage of basic tools developed. We estimate that 5m. hoes are required immediately. The EEC has made a grant available for the purchase of 1m. hoes and, provided the necessary mild steel imports can be obtained, the local industry - both large-scale and small-scale - has the capacity to produce a further 1m. per year. We recommend that every encouragement should be given to the small-scale producers so that after the recovery of the economy, they can continue to operate economically.

9. The Ministry of Agriculture has provided estimates of the immediate needs for purchased inputs for food production. Urgently required are imported wheat and maize seed for the Sebei area. These are their only crops and as they were unable to import seed in 1978 the quality of their planting materials has greatly deteriorated. They also require fertilisers. The Ministry has also suggested that tractors should be imported for the same area. Whilst we are, in general, opposed to the use of tractors for food cultivation on cost grounds we recognise that this is a special and probably worthwhile case.

10. The estimated cost of the rehabilitation of foodcrop production is shown in Table 6.1:

Table 6.1
Cost of Foodcrop Rehabilitation, 1979/80 - 1980/81

	1979/80 Shs.m.		1980/81 Shs.m.	
	Total	F.E	Total	F.E
Hoes (excluding EEC grant)	100.0	75.0	75.0	50.0
Other hand tools	20.0	16.0	15.0	12.
Tractors	0.5	0.5	0.2	0.2
Ox-drawn equipment	10.0	6.0	9.0	5.0
Barbed wire	12.0	12.0	5.0	5.0
Improved seed, etc.	2.5	2.5	2.5	2.5
Fertilisers	2.0	2.0	2.0	2.0
Insecticides and Fungicides	5.0	5.0	5.0	5.0
	152.0	119.	113.7	81.7

11. The food deficit reported to be likely to develop in Teso and Acholi will depend to a large extent on the mid-year rains. It is imperative that steps be taken immediately to monitor the situation. Transport will need to be allocated for this. We assume that this can be met from the Produce Marketing Board (PMB) estimates whose transport needs have been incorporated into the total transport requirements of the cooperative movement (see transport papers).

12. A further point requiring attention is the financial position of the PMB. It is reported to be seriously in debt. It is essential that its debt structure be examined and if necessary the Board be financially reconstructed. Indeed, there seems little reason why the PMB should not be wound up. Now that it is operating in the 'free market' it would seem likely that its responsibilities could be more effectively handled by private entrepreneurs, acting if required under government license. Its subsidiaries such as the Uganda Grain Milling Company, should be transferred to other parastatals such as UDC.

13. Because of poor communication facilities and lack of weather recording instruments, reports of food shortages are often greatly delayed. A national Early Warning System has been suggested to overcome these problems. It is proposed that this be done in association with the FAO Food Security Committee. Such a programme would require the establishment of a set of weather recording stations in strategic areas, and an appropriate field monitoring capacity. It would also require an expert from FAO for two years. We recommend that the project be commenced as soon as feasible.

14. The Ministry of Agriculture has entered into an agreement with the EEC for the re-establishment of its seed production scheme. Certified and registered seed is to be produced at six farms, two in Bunyoro and four in Lango/Acholi. Seeds will be processed at a factory in Masindi. The cost of the project, which includes the rehabilitation of three of the farms and the completion of a new factory is Shs. 30m. for seeds and equipment. The project should be able to commence in January 1980. Outgrowers should replace the state farms as soon as this becomes feasible.

15. Two other projects relating to the production of seed potatoes and other vegetable seeds have been brought to our attention. The former would cost approximately Shs. 0.9m. spread over two years and also requires the short-term appointment of an expert in varietal research into potatoes together with two overseas training fellowships of one year each. The second - a project which would re-establish the production of high-value vegetables for export requires the rehabilitation of Jezza Horticultural Farm together with its transport. It is to cost Shs. 5.5m. spread over two years. It would also require the appointment of two experts, a visiting consultant and several overseas training fellowships. Apart from providing the springboard for rehabilitating the former export vegetable industry, the scheme should also, through fostering nucleus estates and outgrower schemes, accelerate the diversification of small farm incomes into other high value fruit, vegetable and spice crops. On foreign exchange earning and equity grounds, therefore, we recommend that a start be made on this project in the second year of the reconstruction programme.

INPUTS FOR AGRICULTURAL RECONSTRUCTION

D.G.R. Belshaw and W.R. Stent

Increasing agricultural production requires the availability not only of physical inputs but also of a wide range of technical and educational facilities. These we briefly review hereunder.

Planning and Statistics

2. If agriculture is to be organised so as to be able to absorb and to increase production it is essential that there be an effective planning unit within the Ministry of Agriculture. Such a unit can continually monitor agricultural progress and develop a comprehensive range of policies to meet the changing circumstances of the rural situation. Fundamental to this is the requirement for a survey of the disposition of existing agricultural resources. The last census of agriculture was conducted in 1963/64 and a new one, to determine farm holding and household characteristics, areas under crop, crop yields, etc. is urgently needed. We recommend that FAO be invited to assist in the conduct of an agricultural census in 1980/81. A proposal to this effect has been prepared. It is estimated that it would involve the expenditure of Shs. 3.7m. of which Shs. 2.8m. would be in foreign exchange, spent over two years. The project would require the appointment of four expert statisticians for a total period of 44 man-months, together with local support staff.

3. The planning unit itself will require, if it is to conduct effective project analyses¹, additional development and some of its staff need in-service training. This would involve the appointment of an FAO Project Coordinator for a period of at least one year and also a number of short-term training consultants. It would be necessary, in view of the loss of all statistical equipment by looting, to provide a set of such equipment. It is estimated that the entire project would cost Shs. 1m., three quarters of which would be in foreign exchange, spent in the 1979/80 and 1980/81 financial years. The buildings occupied by the planning division are also in need of rehabilitation and re-equipment following looting. This would require the sum of Shs. 1.2m., three quarters of which would be in foreign exchange.

Agricultural Extension and Farmers' Training

4. Effective agricultural extension requires that officers be trained in well-staffed and equipped agricultural colleges and that, once appointed to the field, they are mobile so that they can regularly visit farmers and adequately supervise their field staff. It is also desirable that they be continuously brought up to date with new developments through appropriate in-service training. Unfortunately since 1972 many have been increasingly desk-bound and some have become quite disheartened. Farmer training is also essential if good agricultural practices are to be widely adopted. Unfortunately, as with almost all educational establishments in Uganda the District Farm Institutes (DFIs) were heavily looted during the liberation war.

5. The estimated cost of rehabilitating the agricultural extension division is estimated as follows:

	1979/80		1980/81	
	Shs. m.		Shs. m.	
	Total	F.E.	Total	F.E.
Tractors	1.0	1.0	2.0	2.0
Equipment	4.0	4.0	5.9	5.9
Vehicles	2.8	2.8	2.4	2.4
Motor cycles & Bicycles	2.0	2.0	1.0	1.0
Temporary Housing	0.7	0.5	0.4	0.3
	10.5	10.3	11.7	11.6

¹With particular attention paid to project identification and design activities and the application of modified appraisal procedures to small farmer projects, in addition to the standard appraisal procedures for capital-intensive projects. Training in the wider areas of agricultural strategy formulation and decentralised rural development planning will be required at a later date.

6. The estimated cost of rehabilitating the DFIs is as follows:

	1979/80 Shs. m.		1980/81 Shs. m.	
	Total	F.E	Total	F.E
Furnishing	0.5	0.2	0.3	0.1
Equipment	1.4	1.0	0.7	0.5
Vehicles; tractors etc.	10.0	9.0	4.0	3.6
	11.9	10.2	5.0	4.2

7. Agricultural colleges, i.e. those institutions which provide diploma courses, also require rehabilitation after their looting. This will involve the expenditure of Shs. 1.2m. in 1979/80 and Shs. 2.0m. in 1980/81. In each case half would be in foreign exchange.

8. If the magendo market, and especially smuggling, disappears as a result of Government policies, serious unemployment is likely to develop amongst young people, and especially school-leavers. We recommend that, as a matter of high priority, a young farmers' training programme be reinstituted to assist in solving this problem. This, we estimate, would require the appointment of a specialist Field Officer to each district and the provision of basic training in crop and livestock management to young people. They will also need to be provided with adequate supplies of inputs in order to assist in their establishment as farmers. Such a programme could well be supported by FAO and/or IBRD. We estimate that it would cost in 1979/80 Shs. 6m. and Shs. 11m. in 1980/81. About one quarter of the expenditure would be in foreign exchange.

9. As well as the Young Farmers' Programme it seems desirable to re-establish the Home Economics/Better Family Living Programme which commenced to operate just before the liberation war. All its equipment, including its entire transport fleet, was looted. In this International Year of the Child, UNICEF might help in the re-establishment of the programme. It is estimated to cost Shs. 2m., two thirds in foreign exchange, over two years. A technical consultant would be required throughout that period.

10. Training of employees of the cooperative movement takes place at the Cooperative College at Kigumba. It provides accommodation for 200 students who undertake one and two year Certificate courses and a four year Diploma course. The college was extensively damaged by looting. All buildings, including staff quarters, were ransacked and the library left a shambles with class sets of text books destroyed. All office equipment was stolen or destroyed and the farm machinery and animals confiscated. The College will require extensive rebuilding before it is capable of once more performing its essential training role. We recommend that this task be given high priority. Its cost will be Shs. 7.5m., Shs. 5m. being in foreign exchange.

Agricultural Research

11. A well established research programme is essential for the long-range development of agriculture. However, we believe that in the two years of rehabilitation the agricultural research establishment should be placed on a 'care and maintenance' basis. This will require the purchase of a minimum number of vehicles, laboratory and office equipment together with essential chemicals. We estimate the cost of this to be Shs. 3.9m. in 1979/80 and Shs. 3.6m. in 1980/81. Shs. 3.5m. will, in each year, be required in foreign exchange.

Mechanisation and Labour

12. Previously, considerable emphasis was placed on the need to extend the areas available for agriculture through bush-clearing and tractor hire services. We have

suggested, however, that greater returns to several national objectives will accrue through policies which concentrate on small farm activities. In addition, there is evidence that the employment of tractors is, given the world fuel situation and the constraints of foreign exchange on Uganda's short-term expenditure pattern, generally uneconomic. We therefore propose that the two services be restored only to a limited extent. The cost of this we estimate to be Shs. 30m. in 1979/80 and Shs. 15m. in 1980/81¹. The entire cost would be in foreign exchange.

13. Because the use of complex, imported farm machinery is becoming increasingly uneconomic in Uganda, we commend the Low Cost Equipment Project which has been operating with the assistance of UNIDO. Associated with this could well be a project to popularise the employment of ox-drawn equipment. The Low Cost Equipment project suffered heavy looting; to rehabilitate it would require Shs. 1.4m. in 1979/80 and Shs. 4.4m. in 1980/81. It will also require seven fellowships of six man-months each, the appointment of a technical expert as Project Manager and consultants for a total of 12 man-months. The ox cultivation project would require the appointment of a farm system/extension specialist to train local instructors who will eventually set up mobile schools for training ox instructors and other field staff. This would require Shs. 0.3m. in 1979/80 and Shs. 2m. in 1980/81. Two-thirds of this would be in foreign exchange.

Irrigation

14. Two schemes aimed at the popularisation of the growing of irrigated rice are at present operating at Doko and Kibimba. Both are being conducted with the assistance of the Peoples' Republic of China. To enable them to continue will require Shs. 2m. in 1979/80 and Shs. 4.2m. in 1980/81. The entire expenditure will be in foreign exchange. It is also recommended that two overseas training fellowships be offered to Ugandan staff associated with these projects.

15. There are also pilot irrigation projects at Atera, Labori and Agoro. The last named is a self-help project involving 200 small-holders. To re-activate the first two projects together with their necessary headquarters support would require Shs. 0.9m. in 1979/80 and Shs. 2.5m. in 1980/81. Virtually all the costs would require foreign exchange. The FAO Technical Cooperation Programme may be able to assist with these schemes. If financial assistance for these is not available we recommend that they be put on a 'care and maintenance' basis until 1981/82. The Agoro self-help project requires the expenditure of Shs. 0.3m. in 1979/80, all in foreign exchange. The pilot schemes should be evaluated with a view to deciding on the desirability of an expanded rate of exploitation of Uganda's large irrigation potential. The original UK appraisal mission should be asked to carry out this task if the members of it are available.

Credit and Subsidies

16. In 1961 a Rural Cooperative Credit Scheme was established with the purpose of providing one-year and medium term loans to members of cooperative primary societies so that they could buy agricultural inputs. The scheme was supervised by the primary society members themselves, who are, of course, in a good position to screen potential borrowers whose character alone is the guarantee for borrowings. The scheme has, over the years, worked well. Through it farmers have been able to pay for essential inputs and associated with these there has been the opportunity for timely agricultural extension. Default rates have been relatively low, 4-9% in the case of farmers and 1.5% in the case of primary societies. The main problem with the scheme has been the inadequacy of funds available. No funds other than interest have been added to the Shs. 13m. with which the scheme was established in 1961. The total in the fund now stands at Shs. 15.8m. As a result only 505 out of more than 3,000 societies are able to participate in the scheme. Had the scheme gone in accord with the original plan, 1,800 societies, involving 360,000 families, would have been incorporated into it by 1978.

17. We believe that the scheme is a good one and that agricultural rehabilitation, and especially that of small farms, will be greatly facilitated by its expansion. Accordingly we recommend that the number of societies participating in the scheme be increased from 505 to 650 in 1979/80 and to 800 in 1980/81 i.e. to serve 65,000 and

¹ This would allow for 200 new tractors, spare parts to repair an estimated 250 more, and spare parts for a unified bush clearing unit which would serve both the Ministry of Agriculture and the Ministry of Animal Resources.

90,000 families, respectively. At the same time we recommend that the level of loans available to individuals be increased from the present Shs. 200 to Shs. 500.

18. This proposal would require the injection into the scheme of Shs. 25m. in 1979/80 and Shs. 12.5m. in 1980/81. Later, i.e. in 1981/82, it might be appropriate to extend the scheme to incorporate medium-term lending, but this should be provided only with caution. The prime purpose of the scheme should remain to assist small, rather than medium-scale, farmers. Additional staff will be required to supervise both the cooperative movement and the Ministry of Agriculture. It should also be noted that such officers, requiring to be mobile, will need to have adequate transport. This will require the re-establishment of the Credit Advisory Service of the Ministry of Agriculture which in recent years has been depleted of staff. Their transport requirements would cost Shs. 0.2m. in 1979/80 and Shs. 1m. in 1980/81. This would all be in foreign exchange. The cooperative movement would require additional expenditure of a similar amount.

19. Access to the Cooperative Credit Scheme is available only to members of cooperative societies. There are good reasons why more widespread access to short-term credit should be available. We recommend that a project establishing a small farmers' credit scheme, run in association with the Credit Advisory Service of the Ministry of Agriculture, be designed and appraised.

20. Credit alone may not be sufficient to enable some farmers to purchase the necessary inputs. We therefore suggest that government consider subsidising - by up to 30% - the supply to designated farmers, or groups of farmers, of high pay-off inputs for limited time periods¹. Subsidies should also be provided for the widespread use of fertilisers and other chemicals if it can be clearly established that their use from a national point of view is economic. In determining whether this is the case, due consideration should be given to the foreign exchange situation, i.e. shadow pricing adjustments should be applied to the calculation.

Agricultural Education

21. The implementation of the crucial programmes of agricultural reconstruction and rehabilitation which have been identified in this chapter depend critically upon the replenishment of the stock of trained high-level manpower - graduates and post-graduates - in the relevant specialised fields. The stock of indigenous personnel has been severely run down in key areas by retirement and by emigration into exile. The latter is particularly damaging because personnel are lost to the country when a major part of their professional contribution has yet to be made.

22. Apart from the numbers dimension, the quality of new entrants to the national stock of high-level agricultural manpower has given cause for concern. The decline in the numbers of Ugandan staff (and expatriates knowledgeable about Ugandan conditions) in the Faculties of Agriculture and Veterinary Medicine, delays in the completion of building programmes and the progressive breakdown of training equipment have led to doubts about the operational quality of the training given over the past four years or so.

23. Currently, the Faculty of Agriculture has 19 posts filled by Ugandans out of an establishment of 53, and the Veterinary Faculty has 17 Ugandans with an establishment of 44 posts. The tasks of reconstruction and further development of the economy would lend particularly strong support in the case of these two faculties to the proposals made in Paper 21 to assist the return of exiled Ugandan university teachers to Makerere and to provide expatriate assistance to fill the remaining key posts on a temporary basis. We support the view of senior Ugandan faculty that priority in the latter exercise should be given to attracting to each major field one experienced teacher-cum-researcher who could (i) rapidly identify areas where the curriculum needs strengthening or up-dating, and (ii) provide leadership in the identification and design of a range of relevant production-oriented research projects for implementation within both the University and Government research networks.

¹Such inputs as fertilisers, insecticides and herbicides have been identified in the context of the priority programmes for coffee, tea and cotton which were described in Paper 4.

24. Capital aid is also required for key equipment, teaching and other buildings and for practical training capacity through the existing university farm and the proposed veterinary field station. In the case of the farm and field station the tendency to install the most sophisticated production techniques and enterprises should be avoided, so that the available ingenuity is addressed to improving the viability of existing or clearly potentially-appropriate systems rather than contributing further to atypical capital and management-intensive systems based on a non-adapted imported technology.

25. The twin problems of the relatively deficient training of recent graduates and the professional isolation of Ugandan specialists may be remedied partly by the provision of overseas training fellowships. Both the scale of the problem and the common problem of the inappropriate nature of overseas training in some fields, however, suggest that attention be paid to the merits of establishing at Makerere University an in-service refresher course and up-grading training capacity in the key fields. Recent FAO-assisted developments in the Faculty of Agriculture of Dar-es-Salaam University would seem to offer a relevant model in this respect. We recommend that a project identification mission for the design of a 'Staff College' capacity in the agricultural and veterinary disciplines be jointly requested by the relevant ministry and university authorities.

26. The complex problems of the agricultural sector need to be addressed by the finest calibre of mind which Uganda possesses. The skill and relevance with which agriculture is taught as a secondary school discipline is a crucial element in influencing the professional career choice of the next generation of high-level manpower. If not taught at the highest level, agriculture can too easily be viewed as a subject for drop-outs, as an 'easy option', as a series of tedious manual tasks or as a means for school authorities to augment their revenues through exploiting the pupils' supply of zero-cost labour. These pitfalls can only be avoided by a well-trained and dedicated cadre of specialist teachers. It was with concern that we learned that agricultural education is taught to future specialist teachers without a demonstration school farm - the equivalent of the physics laboratory for training physics teachers. We suggest that the capital and technical assistance required to remedy this deficiency is presented as an aid project and included as a high priority component within the overall programme for Makerere University.

INDUSTRY

AN OVERVIEW OF MANUFACTURING INDUSTRIES

Ruckia Hamisi, S.E. Joseph, S. Montsi and P.K. Sardana

Introduction

This paper contains a brief review of the manufacturing sector, problems for immediate attention, long term policy issues and the scope for international assistance. It is followed by papers on parastatal bodies and public companies, cottage and small scale industries, and, an assessment of the financial and technical requirements during the next two years for the rehabilitation of selected industries such as consumer goods and engineering industries.

2. The assessment and suggestions made in this and the following papers are based largely on study visits to more than two dozen establishments in different parts of the country, and the data and information supplied to us in Uganda. Discussions were also held with senior officers in the relevant ministries, parastatal bodies, and financial institutions. Over two thirds of the manufacturing sector has been covered in this report.

3. We are convinced that if the constraints under which manufacturing industries worked over the last six to eight years had continued for much longer, most of them would have come to a grinding halt. Indeed a few had already closed. A number would have reached a stage of complete financial bankruptcy. Even after the constraints are removed, there are some parastatals and subsidiaries whose viability will be doubtful.

4. The principal factors which led to this state of affairs were (a) the continuous shortage of foreign exchange for importing essential inputs - raw materials, machinery and spare parts; (b) lack of trained manpower; and (c) managerial and financial bunglings by those appointed to senior positions who were neither technically qualified, nor had any previous experience of running industrial or commercial concerns.

5. Many industrial units have suffered heavy damage during the recent war. Stocks of finished products, raw materials, spare parts, vehicles and office furniture, equipment and records have been looted or damaged. In some cases, safes have been smashed and cash looted. In a few factories, machinery and equipment have also been damaged. The looting aggravated the problems of these companies.

Background

6. It may come as a surprise to those not in touch with the recent history of land-locked Uganda that, only a decade ago, the country's industrial sector though somewhat limited - was not only able to produce enough to meet a large part of domestic requirements, but also to export an appreciable part of the total output. Moreover, it was growing rapidly. Some idea of its scale and the pace of expansion can be gathered from the figures for 1966 and 1970 in Table 8.1. Comparing 1978 with 1970 the downturn becomes clear.

7. Developments since 1970 had been affected by a series of far-reaching changes in basic industrial policy. First came the measures announced on May Day, 1970, commonly known as the Nakivubo Pronouncements. The Government decided to acquire a controlling interest in a number of private companies and manufacturing establishments, and also to exclude private enterprise from external trade.

8. This policy had only been partially put into effect when the military took power early in 1971. The new regime decided to reverse this strategy. It reduced state participation from 60 to 49% in 11 companies (including three in manufacturing), though 60% participation continued in seven other companies covered by the Pronouncements.

Table 8.1
Production of Manufactured Goods

	Unit	1966	1970	1978
Cotton and Rayon fabrics	(m.sq.mts)	37	50	28
Blankers	('000 pieces)	641	1,164	165
Matches	('000 cartons)	38	49	8
Super-phosphates	('000 tonnes)	25	25	0
Plywood	(m.sq.ft.)	7	12	2
Cement	('000 tonnes)	122	191	73
Paints	('000 litres)	-	1,660	586*
Cigarettes	(millions)	1,343	1,536	1,867*
Beer	(m.litres)	20	28	22*
Waragei	('000 litres)	238	563	420

*Figures for 1977; all others for 1978

Source: Uganda's Third Plan, 1971/72 - 1975/76
and official estimates.

9. Policy was once again reversed when the economic war was launched in August 1972. This led to the deportation of Asians and non-nationals. It was followed by the allotment of their businesses and industrial units to parastatal corporations - some newly constituted - and also to a number of individuals.

10. The non-nationals who had to leave constituted almost the only experienced technical and managerial cadres in the country. Subsequently, even some of the nationals who took their place and who had some middle-level experience were replaced. Many of the new-comers (who were close to the former ministers or the head of the regime) had practically no previous association with any business or industry. A great deal of political interference in administrative and financial matters resulted in inefficiency and general demoralisation.

11. The principal objective of the Action Programme 1977/78 - 1979/80 was to regain the output levels of 1972. But no serious attempt was made to achieve the targets set. A few new projects were started only to be frustrated by the difficulties that faced industries generally. Little was done to replace obsolete equipment, and spare parts became even more scarce. This, combined with the growing shortage of experienced technical personnel, led to the deterioration of plant and machinery at an alarming rate. In Uganda practically all industries depend on imports, in 1975 these accounted for 57% of industrial inputs. But this sector was starved of foreign exchange. As a result most industries could not get adequate supplies of essential imported inputs. In 1978 the Tororo Steel Works shut down, for lack of materials such as zinc. This deprived the country of an important building material - corrugated iron sheets.

12. The main impact of these events and developments on the industrial sector, has been, briefly, as follows:-

- Except for cigarettes, the level of production of all industrial commodities in 1978 was much lower than that in 1978 (see Table 8.1)
- In both the private and public sectors, a number of factories closed down.
- Due to lack of proper maintenance, the state of plant and equipment - some already second-hand when it was installed - deteriorated further, and the effective capacity available is much less than that originally installed.
- Shortages of consumer, basic and other manufactured goods continued to grow, and this encouraged black marketing and fanned inflation.

- The financial position of parastatal corporations worsened and their request for subsidies increased.

Immediate Problems and Issues.

13. The following difficulties were typical of the situation in 1978 and they were found in most of the establishments visited:-

- Unavailability of foreign exchange, leading to inability to obtain inputs and spare parts.
- Old and obsolete machinery requiring frequent maintenance and spare parts, in a country where there are few experienced technicians.
- Inadequate provision of and/or erosion of working capital, leading to difficulties in meeting obligations including wages.
- Transportation problems including delays, high freight charges and demands for prepayments in foreign exchange by Kenya Railways.
- Unrealistic pricing policy.

14. The revival of many companies depends to a large extent on the availability of foreign exchange. Assuming a phased return to the 1970/71 production levels by the early 1980s, estimates of the local foreign exchange requirements in 1979/80 are Shs. 993 m. This includes 40% for plants not visited by the team. Shs. 518m. is tentatively provided for 1980/81. Some companies did not have clear figures of requirements for 1980/81, and the estimates for that year will need adjustment.

15. Inadequacies in managerial and technical expertise are glaring in some units. Many managers and senior personnel appear to have neither the training nor the experience required for the positions occupied. Many Corporations do not have boards of management (to whom chief executives could report); so there is nobody with the mandate to run the companies on a business-like basis. In some cases, technical problems can hardly be cured without resort to technical assistance - e.g. The National Textile Board, The Matches Company and the lamps factory identified this need. In addition, training for Ugandans in management and technical skills is needed on a considerable scale.

16. Some companies reported that controlled prices were unrealistic as they did not take into account the full production costs of industries. Companies requiring large amounts of imported inputs were hard hit. This problem is addressed in greater depth in the paper on issues.

17. It is fair to conclude that a combination of local capital, foreign exchange and good management should revive production in the industrial sector of Uganda - provided transportation difficulties between the country and Mombasa and also within Uganda itself are eased.

International Assistance

18. In view of the difficulties facing Uganda, it would appear that the bulk of the finance needed for industries will have to come from outside. It is proposed that grants and long-term loans at no worse than IDA (World Bank) terms be sought to finance these requirements (see Table 8.2)

19. The observed weaknesses in management in some companies suggest that provision of funds should be conditional upon plans being submitted for improvement. One alternative is that all funds to this sector be channelled through a local institution with managerial and technical capacity to evaluate management, financial and technical plans, as well as operations of the companies.

Table 8.2
Financial Needs of the Industrial Sector (Shs. m.)¹

	1979/80		1980/81	
	Total	Foreign Exchange	Total	Foreign Exchange
1. Spinning and weaving mills	67	43	125	120
2. Garments, woollen blankets and hessian bags	80	80	100	100
3. Matches	2	1	1	1
4. Paper	10	9	18	18
5. Distellary	9	9	40	40
6. Oil and Soap	45	45	15	15
7. Tobacco Corporation	28	28	25	24
8. Wood Industries	105	29	8	2
9. Engineering Industries	122	122	82	82
10. Chemical Sector	11	11	n.a.	n.a.
11. Minerals and Mining	184	150	143	115
12. U.D.C.	274	30	n.a.	n.a.
13. Other Building Materials	146	128	n.a.	n.a.
14. Others	478	308	n.a.	n.a.
Totals	1561	993	(557) ²	(518) ²

¹ Based on incomplete coverage and in some cases unevaluated statements by Managers - see text.

² Total for industries listed.

20. It was not possible to identify and agree on technical assistance and training needs in many companies. However, a mini-survey by the manpower expert with the Team revealed the following facts and figures:

In 43 companies and bodies in the industrial sector that responded, 91 managerial positions out of 772 were vacant and 21 were occupied by non-Ugandans; 160 out of 502 professional positions were vacant and 19 were occupied by non-Ugandans; 237 out of 1830 semi-professional and technical positions were vacant and 33 were occupied by non-Ugandans. Training needs identified were 340 in the managerial/administrative field, 206 in professional fields and 726 in semi-professional and technical fields. These needs covered both on the job and off the job training.

21. Over-staffing was also reported. These findings confirmed some of the observations of industrial sector members of the team regarding vacancies and need for training. The figures, however, do not tell us much about the experience and calibre of management in the companies and public bodies. Members of the team observed management weaknesses in a number of companies.

22. The following are areas where needs were tentatively identified:

Spinning and Weaving Mills

- Metallurgist to advise on the metals to be used for fabrication of parts and components of textile machinery (period: 1 month).
- A team of 3-4 textile production/financial/engineering experts to review the physical and financial requirements for rehabilitation already assessed by the mills and to advise on fuller utilisation of their capacity and production of finer fabrics (period: 4-6 months).

Matches

- Mechanical engineer to advise on production operations, particularly for reducing the waste of veneers and splints (period: 1 month).

Cottage and Small-scale Industries

- An adviser (economist) to assist the Government in formulation of a detailed programme for the development of cottage and small-scale industries including handicrafts (period: 18-24 months).

U D C

- Two senior experts - one on investment promotion and the second on projects (48-man months).
- One on portfolio management and finance (24-man months).

Lamp Factory

- Lamp technologist (regular basis)

Cement factories Hima and Tororo

- Chief engineer (on regular basis)
- Mechanical engineer
- Chemical engineer
- Mining engineer
- Technical Assistance for Commissioning Phase II at Hima Works (2 men for 3 months).

23. It is also vital, to look at plant - level needs if crisis are to be averted.

24. Figures for individual units on which the estimates are based could not be critically evaluated in every case. However, the situation in the following companies was found to be so critical that the team believed they merit emergency assistance. Unless immediate relief - mostly supplies of raw materials - is forthcoming they will have to close, and it will take greater effort and finance to revive them.

1. Uganda Bags and Hessian Mills	Shs. 8m.
The company produces mainly jute bags. The available stock of jute is very limited and the factory faces closure unless supplies are rushed.	
2. Uganda Hoes Limited	Shs. 505m.
Hoes are critical to the agriculture-based economy of Uganda. The company lacks steel.	
3. Cement Works at Tororo and Hima	Shs. 25m.
Main constraint is gypsum. Marginal imports of this item will push up the production of cement greatly.	
4. Dunlop (E.A.) Ltd.	Shs. 2m.
Again, the critical area is inadequate stock of rubber which may last for only a few weeks.	
5. Steel Manufacturers of East Africa Ltd.	Shs. 15m.
This company, making steel - a vital input to other engineering industries - is facing closure, because of shortage of feed material like scrap, among other reasons.	
6. Kilembe mine	Shs. 126m.
While the amount needed by this company appears high, the expected foreign exchange earnings from cobalt exports should outweigh it.	
	Shs. 181m.

25. Difficulties arising from old and obsolete plants cannot be fully resolved in the rehabilitation period. They need in-depth study by people with the requisite technical know-how. To arrest the problem temporarily and to enable plants to at least start producing, parts and limited replacements are needed: they are allowed for in the above provision for foreign exchange.

26. Some will also need local currency for working capital and local inputs - perhaps another Shs. 400m. for the same group of companies in 1979/80. This excludes companies which have sufficient internally-generated funds or can borrow from local financial institutions. This is certainly the case with the Tobacco Corporation, the Distillery and some textile units. The provision of the sums indicated would go a long way towards solving many working capital and cash-flow difficulties and permit the resumption of production. If units are managed efficiently, they should soon begin to build up some working capital from their proceeds.

27. The movement of inputs to industries, and output to the markets was impaired by transportation problems. While the former problem was serious in all industries, the latter was acute in industries producing bulky products. Difficulties experienced in moving imports and exports meant that a lot of capital was tied up in stocks for abnormally long periods. Moreover, cash flow problems have been aggravated by Kenya Railways demanding advance payments, a reaction to the bad credit record of many Ugandan Corporations. These difficulties, which were particularly serious for exporting Corporation, e.g. the fertiliser companies, are dealt with and solutions proposed in the papers on transportation.

Long Term Policy Issues

28. There are certain issues which, though long-term in nature, have to be considered during the period of rehabilitation as the very rehabilitation itself will affect the industrial structure. For example, sometimes questions arise over whether an existing company should be enabled to survive. There is a need for an in-depth study of the industrial strategy in Uganda. Some issues to be taken into account are outlined in the following paragraphs.

i) Choice of Industries

29. The first principle is to give priority to industries that utilise Uganda's many natural advantages, especially in view of the foreign exchange shortage. Agricultural commodities such as coffee, tea and cotton constitute a resource base for the development of agro-industries - coffee and tea processing, textiles and garment making for example. Abundant cheap hydro-electric power is fundamental for the power-intensive industries such as processing of the numerous minerals - copper, iron ore, limestone, etc., which in turn give a fillip to other industries. Cement industries can stimulate development of the construction sector. The basic chemicals from the Lake Katwe Salt Project can catalyse the development of the chemical, paper and textile industries. Processing of sulphuric acid from sulphur and of caustic soda and soda ash come immediately to the mind. Forest resources are at the base of industries producing paper, match, timber, furniture, plywood etc.

30. The paucity of foreign exchange suggests priority also for import-substituting industries in the first instance. If the bulk of the inputs required are available locally, it is naturally better to import the balance of inputs for indigenous production rather than importing the finished products. The cement industry is a case in point. Uganda has the main feed material, namely limestone, but lacks gypsum, fluorspar and explosives, etc. which account for only a minor component of total cost. Instead of importing cement at a high cost, it is patently preferable to effect marginal imports of supplementary inputs and produce cement indigenously.

31. On the other hand, the size of the market may be such as not to warrant indigenous production just for the sake of import substitution. In a fertile country like Uganda there has not been a very high demand for fertilisers. Should the small market volume be satisfied through imports or should the foreign exchange involved in imports be saved through resort to indigenous production? The latter alternative was adopted in this case, and almost three-quarters of the production has necessarily to be exported. The project may be justifiable on the grounds of net foreign exchange inflow, but the cost of earning that foreign exchange has to be taken into account, including the opportunity cost of funds in a capital-scarce economy like Uganda.

32. Such financial criteria provide one set of guidelines. But there are also social and political considerations. Reducing regional disparities, for example, may outweigh other factors. So may increased economic independence.

ii) Technology

33. Even though during the immediate period of rehabilitation this aspect is not very relevant, as the existing productive apparatus cannot be changed, it will assume importance as rehabilitation gives way to development. The technology employed in most of the industries is out-dated, one result being that spare parts for the installed machinery are not easily available in the international market which in turn means that regular maintenance and much better spare parts management than hitherto are important.

34. The present technical skills of Ugandan personnel probably rule out the widespread application of sophisticated technology. It follows that the skills required need to be acquired through education and training. The industrial policy of most countries specifies a role for international business corporations in high technology areas, with the emphasis on transferring technology so that local personnel are increasingly able to operate the plants themselves.

35. There are certain industries which by their nature raise the threshold of general technical skills. The engineering industry can act as a good carrier of technology because of its multiplier effect. Setting up a chain of fabrication and maintenance workshops in the automotive sector for example, can be profitable. On the other hand, consumer goods, the mass-scale manufacture of which does not create a technology-spread effect, may be better imported; this may also be warranted by considerations of market size and production run.

36. In the process of acquiring technology through foreign investments or licensing agreements, it will be necessary for the Government of Uganda to ensure that only the necessary technology be imported and at a reasonable cost. The scarcity of foreign exchange means there must be no frittering of resources in importing expertise of doubtful validity in the long run. A suggested institutional forum in Government for ensuring this would be a Foreign Investment Board charged with the responsibility of examining and approving (or disapproving) each proposal for foreign investment or collaboration agreements. This Board could work closely with such organisations as UDC in investment promotion.

iii) Ownership

37. This raises the question of ownership and investment. The Ugandan Government has expressed its commitment to a mixed economy policy in which both the private and public sectors have a role to play. The accelerated Ugandanisation of industry through Government ownership has not resulted in the expected benefits, but in fact, as we have seen, has eroded industrial operations. Partly this has been due to the fragmentation of the very limited technical and managerial expertise at the Government's disposal.

38. This suggests the need to delineate the roles of various sectors. Some suggestions in this regard are as follows:

- (i) Relatively high technology areas for which indigenous capabilities are not available and which are important for industrial development - such as mineral-processing, basic materials, etc., can be open to participation by foreign entrepreneurs, as can import-substitution projects and industries involving large amounts of foreign exchange in project costs.
- (ii) Projects involving considerable resources which only the State can marshal, those of basic and strategic importance, infrastructural and public facilities are indicated as falling within the public sector's domain.
- (iii) Most of the other areas can be left free for Ugandan private initiative (eg. Industries producing consumer goods, those of relatively small size, with a limited capital base and employing low technology).

39. The above point to the need to examine critically the various existing parastatals to see if changes in ownership could improve their operational viability or long term development. (See the paper on parastatals). Once an industrial enterprise is established it must be distinctly understood that, whether in the private or public sector, it must run on sound management and business practices.

PARASTATALS AND PUBLIC COMPANIES

S. Montsi

Overall Issues

The present level and nature of government involvement in industry and commerce is the result of a process that started with the Nakivubo pronouncements in 1970. The then Government wanted a 60% participation in a number of private industrial, commercial and financial undertakings. The military regime on its takeover toned down the percentage of government participation to 49% and dropped a few companies from the list. A major reversal of this policy came with the 1972 economic war. The regime decided to accelerate Ugandanisation of ownership and employment in the industrial and commercial sector. Non-Ugandan Asians were required to leave Uganda. As the exodus gathered momentum many Asians with Ugandan citizenship felt insecure and left. Other nationalities also left. All this left a number of companies abandoned and created gaps in management and technical positions in the industrial sectors. Government stepped in and took over control of the abandoned companies. It seconded Ugandan civil servants and some private citizens to the vacant management and technical positions. In a bid to rationalise a chaotic situation, Government decided to append a large number of these companies to the Uganda Development Corporation (UDC) and other existing parastatals. UDC was suddenly faced with the additional operational and management problems of well over 100 companies.

2. In 1974 Government concluded that UDC had become so large that it was getting bogged down with the problems of operating companies, and, in the process, losing sight of its major objective, i.e. to provide dynamic leadership in the identification and promotion of new industries. It is understood that there were also problems of personal jealousies involving the then Chairman of UDC, and these were unfortunately allowed to influence decisions. Government decided to remove a number of operating companies from UDC. Larger viable units were to be set up as independent parastatals and groups of related units were removed and appended to existing parastatals as well as to newly established ones. The outcome was roughly as in the table below and Appendix 9.1.

3. The implementation of the above decisions was haphazard, and the consequences were far reaching for the Government, the affected companies and parastatal bodies, and the private sector. Government machinery and resources were overwhelmed by the new responsibilities. Government had to find managers and technicians to run over 129 companies and public bodies. Very scarce trained and experienced manpower had to be shared with the enlarged semi-public sector. Government assumed the additional responsibility of overseeing and supporting companies previously in private hands.

4. The newly established parastatals had to be provided with funds to set up and fund their subsidiaries. Because of inexperienced management and a combination of other operational problems most companies began to lose money. The seconded managers came cap-in-hand to their ministries and the Treasury for more working capital. Most of the machinery in the nationalised companies was old and obsolete. It was very expensive to maintain. The inexperienced technicians operating the machines often failed to service them at the right time and adequately. As a result, more money had to be provided for spare parts and new machinery. When the burden became too heavy for Government some companies and public bodies were advised to approach banks. Banks - particularly the Uganda Commercial Bank (UCB), were often pressured into assisting public companies and parastatals against their will. This led to an accumulation of debt whose repayment is doubtful. It was not possible to get figures on the total debt of all parastatals and public bodies. The few that submitted returns owed Shs. 746.8m. which they are unable to service. They all look to Government for help (see Annex 9.1).

Table 9.1
Public Companies and New Parastatals

	Year Estab.	Profit/ Loss (1977)	No. of Subsidiaries & Associates		Remarks
			Total	Profitable (1977)	
Uganda Development Corp.	1952	Loss	17	8	No Board
Wood Industries Corp.	1974	Loss	9	2	-
Dairy Corporation	-	Loss	-	-	No Board and no Equity
Lint Marketing Board	-	Profit	16	Nil	Specialised Body
Tobacco Corporation	1974	Profit	3	2	Well run Corp.
Uganda Tourist Dev. Corp.	1974	Loss	3	Nil	No Equity
Uganda Steel Corporation	1974	-	7	-	-
National Textile Board	1974	Profit	11	8	-
Tea Authority	-	Loss	2	-	Specialised Body
Uganda Livestock Corp.	1974	Profit	-	-	No Board - was a Subs. of UDC
3 Sugar Factories	1974	Loss	3	Nil	No Board
Uganda Cement Corp.	1974	Loss	4	Nil	No Board
Uganda Electricity Board	-	-	2	1	-
Uganda Airlines	1974	-	-	-	Was UDC Subs.
Uganda Adv. Board of Trade	1974	Profit	11	8	Specialised Body
National Trust	-	-	4	-	-
Companies under Ministries and Unallocated	-	-	32 ²	-	No Boards

Notes: 1. Where (-) appears it means no information provided

2. 20 responsible to Ministry of Industry

Source: Own construction from information provided by officials and Company Managers.

5. No formal transfer of shares of companies removed from UDC or taken over from Asians was effected. Furthermore, the newly established parastatals themselves have had neither defined capital nor boards. The relationship to their supervising institutions has never been clearly defined. Because they have not had boards, managers have tended to rely on permanent secretaries and ministers for guidance and supervision. And the latter have often taken advantage of these parastatals for political and personal gains under the military regime. Cases of ministers and/or senior officials demanding that certain amounts of companies' output be delivered to their home for no payment have been heard. Most distressing is the fact that many of these parastatals and public companies have not kept proper books of accounts, and have had no audits since 1974. The majority of these companies have been losing money (see Table 9.1 above).

6. Some companies were appended to specialised bodies such as the Lint Marketing Board and the Tea Authority. The bodies had to share their scarce resources with the newly acquired 'subsidiaries'. The Lint Marketing Board management advised that they had to set up a special unit to look after their companies. The Board has also had to advance the subsidiaries money when they fell into difficulties. I was advised that the oil and soap units owed the Lint Marketing Board some Shs. 1.8m. These units are bankrupt and in no position to pay back this money. It is the view of some officials of the Board that the ailing companies have often diverted their attention from areas of primary concern to the Board.

7. Before 1974, UDC was a viable organisation commanding respect both locally and internationally. It was self-sufficient for its administrative budget. It generated enough internal resources to supplement funds it borrowed from Government, local and international institutions, for new projects and expansions. The transfer of many of its viable subsidiaries and associates in 1974 left UDC a weak organisation. Recently, this Corporation has had to join many others in appealing for government assistance to pay wages and salaries as well as to meet other obligations. Interference with its senior experienced staff, led to some of them leaving the Corporation. This weakened it even further. The Corporation began to accumulate large losses. By 1977 its accumulated losses before consolidation stood at Shs. 126m. Shareholders' funds that stood at a proud Shs. 302m. in 1971 had shrunk to only Shs. 33m., way below the paid up equity of Shs. 159m. I was advised that 1978 and 1979 losses are likely to take about half the balance of the shareholders' funds. If the trend does not change by 1981, UDC will have lost all its capital. Because of its cash-flow problems UDC has been accumulating debt through new debt and capitalisation of interest on its old debt. In 1977 its total debt stood at Shs. 273m., of which Shs. 30m. was external. Since 1974 neither interest nor capital repayments have been paid on this debt. By 1977 overdue repayments and interest were Shs. 88m. and Shs. 41m. respectively. This will have seriously eroded confidence in this Corporation by local and international institutions. I was advised that because of the difficulties of the past eight years not all subsidiaries and associates are making a profit. I was further told that far from improving the picture, consolidation would worsen it. Some subsidiaries are also carrying debt which they cannot service.

8. The transfer of UDC companies was not a clean operation. First, while control over assets and operations has been removed no transfer of shares, as is required by company law, has been effected. Secondly, UDC has not been compensated for these transfers. Its equity investment represents Shs. 128m. in the affected companies. As of December 1976, UDC had advanced Shs. 146m. in loans and short-term advances to these companies. The removed companies were also beneficiaries of loans and advances from the Treasury amounting to Shs. 165.4m. These loans were channelled through and guaranteed by UDC. Other guarantees by UDC on loans and overdrafts in favour of these companies stood at over Shs. 136.7m. No arrangements were made for either repayments of loan and/or lifting of UDC guarantees when these companies were transferred (for details on transferred investments, loans and guarantees, see Annexes 9.2 and 9.3).

9. The takeover of private business by Government without compensation, and the establishment of parastatals in areas traditionally reserved for the private sector discouraged private local and foreign entrepreneurs. Hardly any new investment was made by the private sector for the period 1975 to 1978.

10. Except for a very few cases, damage in the war to the parastatal headquarters has not been very large. Most damage is in the form of looted furniture and fittings, machinery and equipment, and vehicles, and the parastatals have started putting this right. It is perhaps the replacement of looted vehicles and imported machinery that is likely to give rise to problems because of foreign exchange difficulties. As records were destroyed by looters, it is not possible to give a clear picture of the magnitude of the damage.

11. Corporations have lost key personnel in the past eight years and during the war. Most of these personnel are in exile in neighbouring countries. Many units are now headed by company secretaries and accountants as acting managers. It is believed that some of these personnel will return once they perceive stability in the country.

The Task Ahead

12. The most urgent need is to bring to a halt the increasing losses by the state as a result of its heavy and rather disorganised involvement in industry and commerce. One way of achieving this is to:

- (a) Hive-off some of the companies and sell them to the private sector.
- (b) Reorganise and restructure the remaining companies in a manner that will lead to efficiency and viability; in some cases Government may wish to consider inviting private partners with the necessary managerial and technical know-how to participate in equity.
- (c) Carefully review UDC's plight with a view to restoring its viability and credibility. This should enable the Corporation to resume its leadership role in the industrial sector.

Government also needs to develop some criteria and machinery for determining and reviewing the nature and level of its future involvement in the industrial and commercial sector.

13. It is appreciated that these objectives cannot be achieved overnight. It is, however, heartening to notice that in the field of commerce, action has already started more or less in line with the spirit of the above recommendations. Government has decided to open up this field to Ugandan citizens, and to foreigners but only in limited areas. Shops and commercial properties abandoned by Asians are being rented out. It is understood that if Asians who are citizens of Uganda return and prove ownership of their properties, they will be given the option of compensation or repossession. The latter will be conditional upon the Asians agreeing not to reverse Africanisation. The Uganda Advisory Board of Trade will be reviewed and reorganised. Rather than concentrate its efforts on trading through its 11 companies, it will ultimately be responsible for promotion and facilitation of both local and international trade. The companies will be disposed of.

14. Unlike commerce the industry division has not yet crystallised ideas and policy on the above issues. It is understood, however, that Government will allow participation by private Ugandans and genuine foreign entrepreneurs in industry. Government understandably wants to be cautious in its approach to industries taken over from departed Asians. In this area Government has called for those Asians who ran large industries to come back if they so wish and participate with Government in a formula to be agreed. Though none of these has yet reported formally to the Ministry of Industry, it is understood that the Mehta Group and the Mahdvanis have already been to Kampala and Jinja in response to this call. Should these groups return, and some agreement be reached with Government, the financial, technical and management problems facing Government in operating the affected companies will be reached. But all this will take time, perhaps two years. It is in the national interest that urgent steps be taken to rehabilitate companies and ensure their smooth and profitable operation. People working in the companies affected by this policy cannot be suspended until negotiations with Asians that may decide to return are completed.

Moreover, Government would be in a much stronger position negotiating over a rehabilitated than an ailing and dilapidated unit.

15. It is essential for Government to have all the necessary details for deciding which companies should be sold to Ugandan citizens, in which companies participation by returning Asians will be desirable, and those for which other partners will be invited. Government needs to determine the base price of the companies, or part thereof. The present information available on a majority of the companies is not adequate for this exercise. Government must also discover the exact amount and nature of its losses in the companies and parastatals, and possibilities for recouping them. It is proposed therefore, that urgent consideration be given to the establishment of a Commission whose objectives will be to:

- Determine the number and nature of all public companies - holding companies, their subsidiaries and associates, and other companies.
- Reconstruct and analyse their accounts with a view to determining their present status, including shareholders' funds, the present value of shares, nature and level of losses, etc.
- Review the operation and advise on the future of each company, assuming a return to normality of the economy. It should also advise Government on the need and levels of write-offs or extension of periods of loan repayment by the company.
- Propose companies to be sold to Ugandan citizens and the base price for each company. Companies of a small to medium scale nature, requiring simple managerial and technical know-how could be included in the list.
- Select those companies for which foreign investors should be invited. This should take into account levels and nature of technology, managerial know-how required, need for export markets particularly outside the East African region, and possibilities and cost of future expansion.

A Secretariat should be appointed to service this committee. It is suggested that a senior official of the Ministry of Industry, a senior official of the Ministry of Finance, and a senior official of UDC be appointed to this Secretariat. A firm of auditors should be appointed to assist with the reconstruction and analysis of accounts.

16. Meanwhile a cleaning up process should start in all companies and parastatals. The necessary transfer of shares should be effected. A firm of auditors could be engaged to effect this with minimum delay. Boards should be appointed and given the mandate to run companies on an efficient and profitable basis. Government should refrain from interfering in the operations of companies except through the normal channels, i.e. boards; and intervention should only be where there is a legitimate cause. The boards should be required immediately to review the staffing position of the companies with a view to ensuring that overstaffing is eliminated and that qualified and experienced chief executives are appointed. The advertising of positions as widely as possible and the fair selection of candidates should be emphasised.

17. The unfair burden imposed on specialised agencies should be removed. It is proposed that the 16 edible oil and soap companies appended to the Lint Marketing Board, the two companies appended to the Tea Authority and the 11 with the Uganda Advisory Board of Trade, be removed. For want of a better home, UDC could be requested to oversee them. These could perhaps be the first to be examined and considered for sale to Ugandan citizens.

18. The re-establishment of UDC viability and respect should be given priority. Apart from playing a leadership role in industry, the rehabilitated UDC could be useful in the reviving of closed and ailing companies. The following action plan is suggested:

- (a) Selection of companies to be re-transferred to UDC. A few viable units would improve UDC's position. Companies that need support and closer overseeing could also be considered. The re-transfer should be well-thought out and effected in an organised fashion.
- (b) UDC should be compensated for the companies that will not be retransferred. As some of the companies would probably be included in the package to be sold, the proceeds could be used to partially compensate UDC. One way of compensating UDC and increasing its equity without straining the difficult cash position of Government, would be to transfer to UDC some of the industrial estates and industrial buildings of departed Asians currently under the departed Asians Properties Custodian Board. This would strengthen the UDC asset base, and improve its borrowing capacity.
- (c) Loans, accumulated interest and UDC guarantees on loans made to companies that will not be retransferred should be taken over by Government.
- (d) Government should assist UDC to renegotiate a moratorium and the extension of repayment periods on its accumulated loans and interest.
- (e) In view of private foreign investment problems in Uganda since the 1970 Nakivubo Pronouncements, UDC is not likely to be attractive to most genuine foreign entrepreneurs. Many 'in by the day and out by the night' types will be attracted to Uganda.

UDC has to be quickly jolted into a position where it can select wisely the good among the bad foreign entrepreneurs. The Corporation should be equipped to initiate aggressive investment promotion to attract desirable foreign investors to Uganda. International confidence in UDC needs rebuilding. It is proposed that international agencies be approached and asked to provide a package of top advisory and operational personnel to assist UDC in this process.

19. The difficulties facing Government and public companies are the result of the haphazard establishment of parastatals and lack of adequate machinery in Government for control and coordination of these bodies. To guard against the recurrence of this problem, it is proposed that a permanent inter-ministerial parastatal coordinating and controlling body be established. Its terms of reference would be to:

- Receive and vet proposals for establishing new parastatals, and advise Government accordingly.
- Receive and evaluate reports, at least annually, of parastatals, and recommend appropriate action by boards and by Government.
- Generate as well as evaluate new policies on parastatals. Follow up the implementation of the policies by the parastatal boards.
- Reconcile any differences in policies that may arise among parastatals.
- Recommend appointments to boards to the appropriate ministers.
- Set basic general standards expected from parastatals.
- Evaluate and approve parastatals' salary structures and fringe benefits: determine the minimum qualifications and experience required for the position of chief executive of the major parastatals, such as the Uganda Development Corporation, Uganda Electricity Corporation, Uganda Tourist Development Corporation, Uganda Steel Corporation, Uganda Railway Corporation, etc. It should also determine the salary ranges and basic fringe benefits attaching to these positions.

External Assistance Required

20. Apart from UDC, assistance for public companies is to be found in the sections dealing with sectors in which these companies are involved, e.g. the Wood Industry Corporation is dealt with in the section dealing with Wood Industries, the Dairy Corporation in Agriculture. UDC needs about Shs. 30m. in foreign exchange to revamp its operations. Assuming that the package recommended in this report is accepted and implemented, UDC should be able to handle the kind of loans extended by IDA (World Bank) or ADF (African Development Bank) without difficulty. To rebuild the image of UDC and equip it for the task ahead technical assistance is required. It is proposed that this assistance cover senior management, investment promotion, and portfolio management and finance. It is preferable that one institution provide the assistance. Perhaps the World Bank, or the DEG (Germany), or the FMO (Netherlands) or CDC (U.K.) could be approached for help in this regard.

List of Parastatal and Subsidiary Companies

	Name of Parastatal Body/Company	Supervising Ministry	Paid up Equity		Indebtedness	Performance		Remarks
			Shs.m.	Shs.m.		Profit/Loss	1977	
1.	Uganda Development Corporation	Ministry of Industry	159.0	274.2		Loss		
1.1	East African Distilleries Limited		1.40			Profit		UDC: 67%
1.2	Tororo Industrial Chemicals & Fertilizers Ltd.		6.40			Loss		UDC: 86.5%
1.3	Uganda Consolidated Properties Limited		8.02			Profit		
1.4	Uganda Grain Milling Company Limited		3.72			Profit		UDC: 47.9%
1.5	Papco Industries Limited		1.04			Loss		UDC: 26%
1.6	African Ceramics Company Limited		1.40			Loss		Closed - 14.9%
1.7	Bjorndal Mines Limited		-			Profit		
1.8	Lake Katwe Salt Company Limited		-			-		New - to be opened soon
1.9	Lango Development Company		1.99			Loss		UDC: 99.5%
1.10	Uganda Crane Industries Limited		31.98			Loss		UDC: 74%
1.11	Itama Mines (closed)		-			-		Closed
1.12	Leather Tanning Industries Uganda Limited		15.6			-		UDC: 20%
1.13	Kulubia Property Company Limited		1.1			Loss		UDC: 75%
1.14	Wolfram Investment Limited		.6			Profit		
1.15	Ugadev Holding Limited		.1			Loss		UDC: 100%
1.16	Associated Paper Industries Limited		.5			Profit		
1.17	Domestic Appliances Company Limited		-			Loss		
2.	National Textile Board	Ministry of Industry						
2.1	Lebel (East Africa) Limited		-			-		
2.2	Nyanza Textile Industries Limited		17.9			Loss		
2.3	Pamba Textiles Limited		-			-		
2.4	Uganda Rayon and Textiles Manufacturing Limited		-			Loss		
2.5	Uganda Garments (1973) Limited		-			Loss		
2.6	Uganda Bags and Hessian Mills Limited		1.56			-		
2.7	African Textile Mills Limited		-			-		
2.8	Uganda Spinning Mill Limited		-			-		
2.9	(African Furnishing House)		-			-		
2.10	Uganda Blanket Manufacturers (1973) Limited		-			Loss		Destroyed
2.11	Uganda Garment Industries Limited		5.7			Loss		
3.	Uganda Steel Corporation	Ministry of Industry						
3.1	Steel Manufacturers E.A. Limited (Steel Corp. of E.A. Limited)		3.26			-		
3.2	East African Steel Products		-			-		
3.3	Uganda Metal Industries Limited (Milltyres Limited)		-			-		
3.4	Uganda Hoes Limited		-			-		
3.5	Uganda Baati Limited		-			-		
3.6	Uganda Metal Products and Enamelling Company Ltd.		4.13			-		
3.7	Tororo Steel Works Limited (Kalamu Limited - Part of Tororo Steel)		-			-		

Name of Parastatal Body/Company	Supervising Ministry	Paid up Equity		Indebtedness	Performance Profit/Loss 1977	Remarks
		Shs. m.	Shs. m.			
4. <u>Uganda Cement Limited</u>	Ministry of Industry	10.4	10.68	-	-	
4.1 Hima Cement Limited		-	-	-	-	
4.2 Spunpipe Construction Company Limited		-	-	-	-	
4.3 Universal Asbestos Manufacturing Company		-	-	-	-	
4.4 Uganda Cement Industry (Tororo)		-	-	-	-	
5. <u>Wood Industries Corporation</u>	Ministry of Industry	16.56	26.5	Loss	Loss	
5.1 City Saw Mill Kampala		-	-	Loss	Loss	
5.2 Kira Saw Mill and Plywood Factory		-	-	Loss	Loss	
5.3 Muvule Saw Mill		-	-	Loss	Loss	
5.4 Budongo Saw Mill and Plywood Factory		-	-	Loss	Loss	
5.5 Bugoma Saw Mill		-	-	Loss	Loss	
5.6 Lendu Saw Mill		-	-	Loss	Loss	
5.7 Jwara Saw Mill		-	-	Loss	Loss	
5.8 Kalingu Saw Mill (2 units)		-	-	Loss	Loss	
6. <u>Tea Authority</u>	Min. of Agriculture	52.5	16.4	Loss	Loss	
6.1 Agricultural Enterprises		-	-	Loss	Loss	
6.2 Uganda Tea Growers Corporation		-	2.2	Loss	Loss	
7. <u>Uganda Airlines</u>	Min. Communication and Transport					
8. <u>Uganda National Tobacco Corporation</u>	Ministry of Industry	32.0	-	Profit	Profit	Well run viable company
8.1 Uganda Tobacco Factories Limited		-	-	Profit	Profit	
8.2 Printpack Uganda Limited		-	-	Profit	Profit	
8.3 Uganda Packaging Industries Limited		-	-	-	-	
9. <u>Uganda Electricity Board</u>	Ministry of Industry					
9.1 Cable Corporation of Uganda		-	-	-	-	
9.2 Ruwex Uganda Limited		-	-	-	-	
10. <u>Uganda Tourist Development Corporation</u>	Min. of Wildlife & Tourism	-	-	Loss	Loss	
10.1 Uganda Hotels		10.44	7.0	Loss	Loss	
10.2 Uganda Wildlife Development Ltd.		1.0	12.4	Loss	Loss	
10.3 Tours and Travel Limited		-	-	Loss	Loss	
11. <u>Uganda Advisory Board of Trade</u>	Ministry of Commerce	-	-	Profit	Profit	
11.1 Intra Africa Traders Limited		-	-	-	-	
11.2 Uganda Industrial Machinery Limited		-	-	-	-	
11.3 Uganda Duty Free Shop		-	-	-	-	
11.4 Uganda Pharmaceuticals Limited		-	-	-	-	

	Name of Parastatal Body/Company	Supervising Ministry	Paid up Equity Shs. m.	Indebtedness Shs. m.	Profit/Loss 1977	Remarks
12.	<u>Uganda Livestock Industries Limited</u>					
13.	<u>Companies under Prison (Internal Affairs)</u>					
13.1	Jute and Kenaf		-	-	-	
13.2	Uganda Meat Packers - Soroti (Pack Meat for Soldiers)	Min. of Animal Resources	8.0	13.9	Profit	No Board
14.	<u>Companies under Ministry of Information & Guidance</u>					
14.1	Consolidated Printers		-	-	-	
14.2	International Television Sales Limited		-	-	-	
15.	<u>Companies under Ministry of Communication</u>					
15.1	Uganda Transport Company Limited		-	-	-	
15.2	Transocean Uganda Limited		-	-	-	
15.3	People's Transport Company Limited		-	-	-	
15.4	Uganda Taxi Services		-	-	-	
16.	<u>Uganda Railways Corporation</u>	Ministry of Communication	-	-	-	
17.	<u>Companies under Ministry of Commerce and Industry</u>					
17.1	Uganda Breweries Limited		-	-	-	
17.2	Dunlop East Africa Limited		-	-	-	
17.3	East African Glass Works Limited (closed)		-	-	-	
17.4	Uganda Fishnet Manufacturers Limited		-	-	-	
17.5	Kakira Sugar Works Limited		-	(b)	Loss	
17.6	Uganda Sugar Factory Limited (Lugazi)		-	106.0	Loss	
17.7	Lake Victoria Bottling Company Limited		-	-	-	
17.8	Nile Breweries		-	-	-	
17.9	Uganda Paper Bag Manufacturers (1973) Limited		-	-	-	
17.10	Sango Bay Estates Limited (closed)		-	-	-	
17.11	General Equipment (Uganda) Limited		-	-	-	
17.12	Fishnet Distributors (Uganda) Limited		-	-	-	
17.13	Blenders Uganda Limited		-	-	-	
17.14	Uganda Meat Packers Limited		-	-	Loss	
17.15	Jubilee Ice and Soda Works		-	-	-	
17.16	Kalamu Limited		-	-	-	
17.17	Mukisa Foods Limited		-	-	-	
17.18	Kilelesh Mines		4.93	-	Loss	
17.19	Associated Match Company		-	-	Loss	
17.20	Ugma Steel and Engineering Corporation		-	-	-	
18.	<u>Companies under the Ministry of Agriculture</u>					
18.1	Wheat and Barley Project		-	-	-	
18.2	National Sugar Works (Kinyala) Limited		-	-	-	

	Name of Parastatal Body/Company	Supervising Ministry	Paid up Equity Shs.m.	Indebtedness Shs.m.	Performance Profit/Loss 1977	Annex 9.1 (Contd.) Remarks
19.	<u>Companies under the Ministry of Rehabilitation</u>					
	19.1 National Housing & Construction Corporation					
20.	<u>The National Trust - Ministry of Justice</u>					
	20.1 Uganda School Supply		-	-	-	
	20.2 Publishing House		-	-	-	
	20.3 Ugativeness - Mbale		-	-	-	
	20.4 Uganda House		-	-	-	
21.	<u>Independent and Unallocated</u>					
	21.1 Uganda Chibuku Limited		.73	5.2	Loss	
	21.2 Kampala International Hotel		-	-	-	
	21.3 Uganda Securiko Limited		-	-	-	
	21.4 Uganda Taxi Services Limited		-	-	-	
	21.5 R.O. Hamilton Limited		-	-	-	
	21.6 Building Works and Painting Company Limited		-	-	-	
	21.7 Dogra Engineering Company (U) Limited??		-	-	-	
	21.8 Machinery Manufacturers Limited		-	-	-	
	21.9 Uganda Leather and Tanning Industries Limited (Soroti)		-	-	-	
22.	<u>Lint Marketing Board</u>	Ministry of Cooperatives and Marketing	20.3	-	Profit	
	22.1 Edible Oil & Soap Industries (16 units)		-	-	Loss	
23.	<u>Dairy Corporation</u>	Ministry of Animal Resources	-	-	Loss	
24.	<u>Produce Marketing Corporation</u>	Ministry of Agriculture	-	67.8	Loss	
			427.76	738.32		

(a) U.D.C.'s indebtedness include debt raised on behalf of some of the transferred subsidiaries and Associated Companies

(b) Indebtedness to U.C.D. by both Kakira Sugar Works and Uganda Sugar Factory Limited (Lugazi)

(c) Where (-) appears means no information is available

(d) Source: Officials of U.D.C.
Ministry of Industry
Ministry of Finance

Companies removed from UDC in 1974 (Figures for December 1978)

	Shares Lost by UDC (Shs.m.)	Unpaid Loans & Advances (Shs. m.)	Total (Shs.m.)
<u>Agriculture and Forestry</u>			
Agricultural Enterprises Ltd.	52.5	16.1	68.6
Toro Development Co. Ltd.	1.0	16.1	17.1
Uganda Crane Estates Ltd.	1.0	3.1	4.1
	54.5	35.3	89.8
<u>Animal Resources</u>			
Uganda Livestock Industry Ltd.	6.1	9.2	15.3
Uganda Fish Marketing Corp. Ltd.	2.0	0.7	2.7
Uganda Meat Packers Ltd.	5.5	40.6	46.1
	13.6	50.5	64.1
<u>Commerce</u>			
Industrial Promotion Services (Custodian Board)	3.9	-	3.9
<u>Industry and Power</u>			
Nyanza Textile Industry Ltd.	18.0	0.5	18.5
The Uganda Metal Products and Enam. Company Ltd.	4.1	1.2	5.5
Uganda Cement Industry Ltd.	10.4	18.0	28.4
United Garment Industry Ltd.	1.2	4.7	5.9
Uganda Spinning Mill Ltd.	-	0.4	0.4
The Chillington Tool Co. Ltd.	0.4	0.7	1.1
Kilembe Mines Ltd.	5.0	-	5.0
Kilmex Mines Limited	0.7	-	0.7
Steel Corporation (E.A.) Ltd.	3.3	0.5	3.8
Uganda Bags & Hessian Mills Ltd.	1.6	0.1	1.7
Uganda Fish Net Manufacturers	0.8	-	0.8
	45.5	26.1	71.6
<u>Tourism and Wildlife</u>			
Uganda Wildlife Development Ltd.	1.0	1.8	2.8
Uganda Hotels Limited	10.4	41.9	52.3
Safari Lodges Prop. Ltd.	-	1.5	1.5
Kampala International Corporation	0.7	-	0.7
	12.1	71.3	83.4
<u>Transport and Communication</u>			
Uganda Air Limited	-	2.0	2.0
Uganda Aviation Services	0.2	2.7	2.9
	0.2	4.7	4.9
GRAND TOTALS	129.8	187.9	317.7

UDC's Outstanding Guarantees in Favour of its Former Companies
As at 31st December, 1978

		<u>Shs. m. Guarantees</u> ^(a)
<u>Ministry of Agriculture & Forestry</u>		
Agricultural Enterprises Ltd.	Bank Overdraft	1.6
Bugembe Plantation	Foreign Loans	3.2
Kiko Tea Company Limited	Foreign Loans	0.1
Mwenge Tea Company Limited	Foreign Loans	8.0
Uganda Crane Estates Limited	Bank Overdraft	0.2
		13.1
<u>Ministry of Industry and Power</u>		
Uganda Cement Industry Limited	Foreign Loans	78.9
Uganda Cement Industry Limited	Bank Overdraft	14.0
Uganda Cement Industry Limited	Bank Overdraft	6.0
Nyanza Textile Industry Limited	Foreign Loan	3.1
Nyanza Textile Industry Limited	Local Loan	2.0
Associated Match Company Limited	Bank Overdraft	3.0
Uganda Baati Limited	Bank Overdraft	0.3
		107.3
<u>Ministry of Animal Resources</u>		
Uganda Meat Packers Limited	Bank Overdraft	10.0
Uganda Livestock Industries	Bank Overdraft	3.0
		13.0
<u>Ministry of Tourism and Wildlife</u>		
Uganda Wildlife Development Ltd.	Bank Overdraft	0.4
Uganda Hotels Limited	Foreign Loan	0.6
		1.0
<u>Ministry of Commerce</u>		
Fresh Foods (U) Limited	Bank Overdraft	0.4
<u>Ministry of Transport, Communications & Works</u>		
Uganda Aviation Services Limited	Local Loan	0.4
	GRAND TOTAL	135.2

COTTAGE AND SMALL-SCALE INDUSTRIES

S.E. Joseph

Industrial establishments employing less than 10 persons on an average in a year, are obliged to obtain a licence. But complete and up to date statistical information about them is not available. However, according to such rough data as are available, while the number of industrial units employing more than 10 persons has declined since 1970, the number of those employing less than 10 persons has increased. The smaller units include a large number of garment making and tailoring establishments, motor and other workshops, bakeries and establishments making furniture, leather products, bricks, metal products, etc.

2. It was claimed by the Amin Government that cottage and small-scale industries had been assisted by the Ministries of Culture, Community Development and Labour and the Management Training and Advisory Centre through the establishment of industrial estates and centres for vocational training, printing of cloth, handlooms, handicrafts, assembly of umbrellas, etc. But these institutions and schemes did not function effectively, nor did they form a part of any development programme for providing financial, technical and other assistance to these industries. For instance, the role of the Management Training and Advisory Centre in the administration of an industrial estate was merely to collect subsidised rents, which are also in arrears. It was mainly for the purpose of taking up a promotional programme that a new Ministry of Small-Scale Industries was set up a few years ago. But the Ministry functioned only for a few months.

3. There would be several distinct economic and social advantages in initiating a comprehensive programme for the promotion and development of cottage and small-scale industries, including handicrafts and a variety of service industries. Development of those industries allows the mobilisation of human and other resources for productive and remunerative activities in the urban as well as semi-urban areas, which cannot always be fully absorbed in agriculture and the organised industrial sector. Most of these industries do not require large investment, specialised skills, high managerial talents or long gestation periods. The growth of these industries in most developing as well as developed countries has also helped in reducing regional imbalances and in the promotion of entrepreneurship and techno-managerial talents required for medium and large scale industrial undertakings.

4. A development programme for these industries would have to comprise a number of schemes for providing financial, technical and other assistance. In order to restrict such assistance to suitable and deserving persons, it would be necessary to define a small industry by prescribing a ceiling on its investment in plant and machinery only (as investment on land and buildings vary from place to place). Some of the more important schemes which may be taken up under such a programme are briefly outlined below:

- a) Provision of credit for fixed and working capital at concessional terms and conditions including supply of machines on hire-purchase terms. (The EEC has agreed to a credit line for those industries and Japan and West Germany have provided assistance for instalment credit to some countries).
- b) Provision of techno-managerial assistance to small entrepreneurs by an organisation having technically qualified and experienced staff.
- c) Introduction of a simple system of registration, in lieu of the existing system of licencing.
- d) Supply of a set of tools and appliances on hire-purchase terms of those successfully completing their technical training so as to assist them to start their own production or service units in the trades in which they have been trained.

- e) Establishment of a few common services and facilities centres, and training and production centres, for selected trades and resource-based industries and also small low-cost industrial workshops and industrial estates (UNIDO can be approached for assistance).
- f) Services of master craftsmen for improving the quality and designs of selected traditional handicrafts (CFTC/UNIDO/ILO can be approached for assistance).

5. It would be helpful if the Commonwealth Secretariat/UNIDO is approached also for the services of an Adviser to assist the Government in the formulation and implementation of a development programme for these industries as an integral part of the overall industrial development programme.

PAPER 11

THE MAIN INDUSTRIAL SECTORS

1. TEXTILES

S.E. Joseph

Introduction

The textile industry which was brought under the purview of the National Textile Board (NTB) in 1974, consisted of one cotton spinning mill, four composite spinning-cum-weaving mills, two garment manufacturing factories, one woollen blankets factory and another making gunny bags and hessian cloth. A handloom weaving project had also been started in 1968 by the Ministry of Culture and Community Development. Apart from these government establishments, there were several garment making units of varying sizes in the private sector.

2. All these units have continued to function. Those under the NTB now provide employment for about 13,600 persons. Their authorised and paid-up capital amounts to about Shs. 93 and 84m. respectively.

3. Up to 1972, the industry was able to meet the country's requirements of cloth and also to export a substantial quantity. But since then, both production and exports have declined. The relevant figures since 1970 are shown in Table 11.1.

Table 11.1
Cotton and Other Fabrics (m. sq. metres)

Year	Production	Imports	Total	Exports	Domestic Consumption
1970	50	6	56	16	40
1971	46	11	57	12	45
1972	48	8	56	11	45
1973	38	6	44	10	34
1974	36	5	41	2	39
1975	36	6	42	N	42
1976	(43)	3		-	
1977	(41)	n.a.		-	
1978	(30)	n.a.		-	

Notes: The figures of production in brackets are in linear metres.
The figures of imports include fabrics of cotton, synthetics and regenerated fibres.

N: Negligible

n.a: Not available

Source: NTB and Annual Trade Reports.

4. The composite textile mills were all established with varying quantities of old and second-hand plant and equipment, some of which dates back to 1899. However, the mills could not replace the obsolete machines and also maintain others with new parts and components, mainly because of their inadequate allocations of foreign exchange. Their output had also been adversely affected by the shortage of funds for the mills to

purchase raw cotton, and a steady decline in the productivity of labour. Almost all the mills have small workshops to fabricate some parts and components for replacement purposes, but the mills will continue to depend largely on imported parts and components for some years to come.

5. During the recent war, the bulk of the stocks of cloth, raw materials, spare parts and vehicles of all the mills except one (namely, Nyanza Textile Industries) were looted. It is informally understood that looting of one mill was led by a former minister and his men.

6. The per capita availability of cloth in 1970 was about 4.2 sq. metres. A modest objective of the programme for the rehabilitation of the textile industry over the next two years should be to increase the quantity available for domestic consumption to at least 58 m. sq. metres so as to ensure per capita availability of 4.2 metres by 1981.

7. It is estimated that for production of 58 m. sq. metres of cloth, about 11.6 to 13.0 m. kgs. of yarn would be required which, in turn, would depend on the availability of about 14.5 to 16.2, m. kgs. of raw cotton (or about 78,400 to 87,600 bales).

8. Yarn production

The present installed and operating capacities of the spinning mills are shown below and the production figures of individual mills is tabulated in Annex 11.1.

Table 11.2

	No of Spindles		Annual Capacity To produce Yarn	
	Installed	Operating	Installed	Operating
Uganda Spinning Mill	64,000	25,600	3.6	1.4
Nyanza Textile Industries	34,516	27,000	5.4	3.3
Pamba Textile	23,512	10,700	4.0	1.4
Uganda Rayon Textiles Manufacturers	2,800	2,400	0.5	0.2
African Textile Mill	22,380	12,000	1.5	0.8
	147,208	77,700	15.0	7.1

Source: National Textile Board.

The present operating capacity, if worked on a double shift basis, is enough to meet the requirements of 11.6 to 13.0 m. kgs. over the next two years.

9. Cloth Production

Annex 11.1 contains the production figures of different mills. Table 11.3 shows the weaving capacity of the existing mills. The operating capacity to produce cloth on a double shift basis is more than adequate to meet the country's needs of 58m. sq. metres over the next two years.

Table 11.3

	No. of Looms		Annual Capacity to Produce Cloth (m.metres)	
	Installed	Operating	Installed	Operating
Nyanza Textile Industries	912	850	36.0	25.2
Pamba Textile	460	330	15.0	7.6
Uganda Rayon Textile Manufacturers	200	100	3.3	1.9
Africa Textile Mill	550	300	10.0	5.4
	2,122	1,580	64.3	40.1

Source: National Textile Board.

10. Financial Position

Three textile mills were visited. Their present financial position and requirements - immediate and over the next two years - are briefly reviewed in the following paragraphs.

11. a) Nyanza

The mill did not suffer any war damage. It has also no financial liabilities. On the other hand, about Shs. 12m. are due to it including about Shs. 7m. from the Lint Marketing Board and Shs. 5m. from the Kilombe Mines. Over the last few years, the average annual profits have been Shs. 7-10m.

12. The mill is urgently in need of raw cotton, dyes and some chemicals. High priority needs also to be given to the installation of a new blowing room unit for augmenting the spinning capacity, renovation of some old looms (Northrop make) and processing facilities. The mill has drawn up a detailed short-term programme of rehabilitation.

13. b) Pamba

The mill has fully availed itself of the overdraft facility of about Shs.15m. and has a bank loan of about Shs. 5 million. According to the provisional estimates, it incurred a loss of about Shs. 9m. in 1978.

14. The mill has suffered heavy war damage. Stocks of cloth, raw materials, spares, office equipment, vehicles, etc., have been looted. Printing machinery has also been damaged to some extent and most of the office records are reported to be missing. Therefore, the mill is urgently in need of funds for purchases of raw materials, etc.

15. c) Rayon:

The mill has used its overdraft facility of about Shs. 2.5 m. Its accumulated losses up to last year are estimated at Shs. 5 m.

16. Like the Pamba mill, this mill was also ransacked. The present stocks of raw materials are adequate to utilise the capacity only to a small extent for the next few weeks.

17. Financial and Personnel Requirements:

All the mills have made fairly detailed inventories of their requirements for rehabilitation along with the estimates of funds required during 1979-80 and 1980-81. It is, however, noted that while Nyanza, the largest mill, has assessed its total requirements for the next two years at about Shs. 50m., the corresponding estimates of Pamba

range between Shs. 124m. (including Shs. 16 m. for war damages) and Shs. 140m. and those of the Rayon amount to Shs. 25m. for the next year only.

18. The Board's assessment of the financial needs for 1979-80 (Annex 11.2) are summarised below:-

NTB's estimates for 1979-80 (Shs.m)			
Mills	Local	Foreign Exh.	Total
Spinning	4.2	4.5	8.7
Nyanza	-	12.0	12.0
Pamba	9.0	11.0	20.0
Rayon	2.5	4.5	7.0
African	8.0	11.0	19.0
	23.7	43.0	66.7

Assuming these estimates to be fairly reasonable, the requirements for 1980-81 may be roughly assessed at about Shs. 125 m., including Shs. 120 m. of foreign exchange. However, these estimates need to be reviewed urgently on the basis of a production target of 42 m. sq. metres of cloth in 1979-80 and 58 m. sq. metres in 1980-81. It should be possible for the NTB to reassess the minimum financial requirements on an urgent basis for producing 42m. sq. metres on a double shift basis in 1979-80.

19. It is also considered necessary that steps should be taken during the early part of next year to make a detailed assessment of the machinery and spare parts required for the rehabilitation of the industry so that it could produce 52m. sq. metres of cloth by 1980-81. For this purpose, international organisations such as the Commonwealth Secretariat may be approached for a team of 3-4 experts in textile engineering, production and financial management for a period of about 4-6 months, who could also recommend measures for fuller utilisation of the capacity and production of finer varieties of cloth. It will also be useful if the services of a foreign Metallurgist are obtained for about a month to advise on the metals to be used for fabrication of spare parts.

20. Powerlooms: As mentioned earlier, a handloom project is functioning. The productivity of a handloom is nearly one-third of a powerloom. It is, therefore, suggested that the feasibility of setting up a few centres, each containing about four to six powerlooms, may be examined. These centres may initially be set up on a pilot basis, preferably in the vicinity of the spinning mill at Lira.

21. Garment Manufacturing: As mentioned earlier, two factories, namely, Uganda Garment Industry Lt. (UGIL) and Uganda Garments Ltd., are subsidiaries of the NTB. The former is a joint venture, with 30% equity participation by a Japanese firm. Its paid-up capital is Shs. 5.7m. and it employs 1,200. The other factory which had 120 workers, is not functioning at present.

22. The UGIL's capacity and volume of production over the last few years are shown in Table 11.4.

23. Shortage of foreign exchange for the import of fabrics, chemicals and accessories, has been the main factor responsible for the firm's production lagging behind its installed capacity. However, the firm has been making profits amounting to about Shs. 2.5m. per annum. During the recent war, the firm suffered considerable damage, which is estimated at about Shs. 25m. It is expecting aid of about Shs. 15m. from the Japanese firm which also has a project for setting up plants for making suits and uniforms.

The NTB is also considering a proposal for the UGIL to take over the management of the other subsidiary. The proposal needs to be processed as early as possible. The Board's estimates of the foreign exchange required for imports of cloth, spares, etc., are indicated in Annex 11.2.

Table 11.4
UNITED GARMENTS INDUSTRY (UGIL) (000s)

Annual Capacity	Shirts	Knitted	Trousers	Ladies Garments
Installed	48.0	96.0	14.4	12.0
Operating	24.0	48.0	9.6	4.8
<u>Production</u>				
1974	49.4	62.6	6.6	-
1975	31.8	43.6	4.9	-
1976	27.9	61.4	7.3	3.8
1977	33.1	45.8	9.0	4.2
1978	26.8	43.4	7.9	4.9

Source: National Textile Board.

24. Woollen Blankets: Woollen blankets are being produced by only one mill, namely, The Uganda Blanket Manufacturers, which came under the purview of the National Textile Board in 1974. It has 78 looms and a capacity to produce 1.5m. blankets a year. Its present operating capacity is 132,000 blankets only, but the production has continuously declined. The figures for production and imports are:

Table 11.5
Data on Woollen Blankets ('000 pieces)

	<u>Production</u>	<u>Imports</u>
1970	1,164	75
1971	1,396	198
1972	1,204	63
1973	363	4
1974	365	43
1975	322	53
1976	222	29
1977	233	n.a.
1978	165	n.a.

n.a.: not available

Source : National Textile Board & Annual Trade Report.

25. The mill was not visited, but shortage of foreign exchange for import of raw wool and spare parts has been the main reason for the falling production. Recently, the mill was also looted. The NTB's estimates of the financial requirements are shown in Annex 11.2. These estimates need to be reviewed since they do not indicate the levels of production likely to be achieved over the next two years. It may be feasible to raise the production to about 500,000 items by 1979-80 and to over 1m. by 1980-81. The estimates need to be reassessed accordingly.

26. Jute Products: The Uganda Bags and Hessian Mills is a joint sector project between the Government (40%), an Indian firm (50%) and others (10%). At present, it employs about 570 persons. Its annual installed and present capacities are indicated below along with the figures of production:

Table 11.6

	Data on Jute (Tonnes)			
	<u>Gunny bags</u>	<u>Hessian cloth</u>	<u>Jute twine</u>	<u>Total</u>
<u>Installed capacity</u>	5,520	960	20	6,500
<u>Operating capacity</u>	1,200	185	10	1,395
<u>Production</u>				
1971	2,357	376	21	2,754
1972	4,090	637	1	4,728
1973	3,252	547	75	3,874
1974	3,275	364	63	3,702
1975	1,505	160	10	1,675
1976	1,550	147	15	1,712
1977	633	19	29	681
1978	828	15	-	843

Source: National Textile Board.

27. According to a report, the factory could supply about 75% of the domestic demand of bags and cloth which are mainly for export of coffee and cotton; the balance of imports which ranged between 1-4m. pieces from 1974 to 1976. But the shortage of foreign exchange for import of jute and spare parts has been responsible for the fall in production since 1971. It is understood that under a Saudi Arabian Loan agreement, a project was taken up some time back for the development of a kenaf and jute industry, but information about the progress of the project was not readily available.

28. The present stocks of raw jute are likely to last another 4-6 weeks. According to the NTB, Shs. 8m. are required in 1979-80 for import of raw materials and spare parts (Annex 11.2), as compared to the mill's estimate of Shs. 20m. It would be desirable to provide the minimum funds required for increasing the total production to almost 3,000 tonnes next year and 4,500 by 1980-81. Since the stocks at present are very low, and it takes about 3-4 months to import raw jute, steps have to be taken urgently for obtaining some supplies from abroad.

2. CONSUMER GOODS

S.E. Joseph

(a) Oil and Soap

29. In 1972, 18 oil mills which were also producing soap, were passed on to local entrepreneurs. The new owners mismanaged the mills so much that some mills came to a collapse, leading to a serious congestion of cotton seeds with the ginneries. This was followed by the taking over of the mills along with the soap factories by the Lint Marketing Board in accordance with a public announcement by the then President.

30. The position on domestic consumption of oil and soap was as in Table 11.7. The annual per capita consumption of oil and soap in 1970 works out at about 1.3 kgs each. To ensure the same level of consumption in 1981, production of 18,000 tonnes each of oil and soap would be required.

Table 11.7

	<u>Oil</u>			<u>Soap</u>
	Production	Imports	Total	Production & Total
1970	17	4	13	13
1971	17	4	13	14
1972	16	2	14	14
1973	13	1	12	6

31. At present, only 11 oil mills and 8 soap factories (including 7 oil mills) are working, which fall within the purview of the Lint Marketing Board (Annex 11.3). Their estimated annual capacities of producing 14,360 tonnes of oil and 12,845 tonnes of soap, if worked on a double shift basis, are adequate to meet fully the domestic needs over the next two years. The oil plants are also capable of manufacturing 'ghee' and margarine, but are unable to do so owing to shortage of groundnuts. A few mills are equipped to manufacture tin cans and have been supplying these to the other mills.

32. Since 1974, the production has been lagging far behind capacity; the relevant figures are:

	<u>Production</u>	
	<u>Oil</u> ('000 tonnes)	<u>Soap</u> (tonnes)
Estimated Capacity	14.4	12,880
1974-75	6.1	2
1975-76	2.0	2
1976-77	2.0	1
1977-78	1.5	1

Uganda had been importing soap till 1975.

33. The main reasons for the continued fall in output of oil as well as soap have been the gradual decline in the production of cotton seeds, the shortage of imported raw materials for soap and spare parts for the plants, and poor maintenance of the machinery. The management of the Board is of the view that obsolete plant and frequent directives and interference by the Government in the management and running of the mills have also been responsible for the under-utilisation of the capacity and the financial losses. The position about the raw cotton and cotton seeds has been discussed in the paper on Agriculture. At present, the mills are reported to have only about 3,000 tonnes of cotton seeds, against their annual average consumption of 30,000 tonnes in the past. Oil and soap are essential items of mass consumption. Therefore, suitable arrangements should be made urgently to import either seeds, or oil and soap so as to prevent an acute shortage and a further rise in prices.

34. With the anticipated increase in the production of raw cotton, it should be possible to produce more and resume exports of oil and oil cakes. Therefore, it is necessary to rationalise the industry over the next year or so. Considering that some of the large mills have the capacity to meet fully the domestic market and also to export some, it would be better to utilise the machinery of some of the smaller and un-economic mills for renovating the machinery of the larger ones, working on double or triple shifts.

35. The financial requirements for rehabilitating the industry over the next two years as assessed by the Lint Marketing Board, are indicated below:

	(Shs. m.)
Cotton Seeds	102
Other Raw Materials	83
Spare parts	10
	195

These estimates include the requirements of three oil mills which are not working and also about 113,000 tonnes of cotton seeds. Excluding the requirements of the closed mills and providing for cotton seeds and other raw materials for production of about 8-9 tonnes, about Shs. 45m. may be required for 1979-80. It is assumed that the domestic production of cotton seeds would be adequate to increase the production to about 18,000 tonnes by 1980-81. Therefore, the amount required for import of raw materials and spare parts in 1980-81 would not exceed about Shs. 15m.

(b) Matches

36. The associated Match Company is the only factory producing matches. Its annual installed capacity is 54,000 cartons, but the production depends largely on vehicles for transport of logs for veneers and foreign exchange for imports of splints, chemicals, paper and spare parts. Due to the continuous shortage of foreign exchange, production has declined rapidly since 1974 and the factory is now working at about 15% of its capacity. The figures of production are:

	<u>Production</u> ('000 cartons)
1970	49
1971	59
1972	51
1973	44
1974	30
1975	31
1976	17
1977	10
1978	8

The fall in production is responsible for pushing up the market price of a match box to Shs. 2, as against the ex-factory price of 50 cents.

37. A plant for making cardboard boxes was imported sometime back, but has not been installed owing to lack of financial resources. Although the factory has not suffered any war damage, it has practically no lorry in good working condition. Its present financial liabilities include about Shs. 2.4m. of debts, a bank loan of Shs. 2.7m., an overdraft of Shs. 1.5m. and Shs. 0.4m. for salaries to be paid. Cash in hand and in the bank is negligible.

38. The factory is urgently in need of at least one lorry in good condition, about Shs. 0.6m. in foreign exchange for the import of essential raw materials, and some suitable amount in local currency for clearing debts, paying salary arrears, etc. Additional funds would be required in 1980-81 for purchase of one or two more lorries, spares, chemicals, etc., in order to enable the factory to utilise its capacity fully on a multiple shift basis. Total provision of Shs. 2m. is recommended for 1979-80 and 6.5m. in 1980-81.

39. It would be useful for the working of the factory to be studied rapidly by a technical consultant, particularly so he could suggest ways of reducing the waste of veneer and splints in the manufacturing operations. It should be ascertained from the Forest Department whether suitable wood for making splints is available within the country. The UDC may also study the economics of installing the plant already imported for making cardboard boxes.

Paper

40. The Papco Industries Limited, a subsidiary of the UDC, is the only factory making certain types of paper including bond, bank, duplicating, cover and wood-free paper. Against its annual installed capacity to manufacture 3,000 tonnes of paper, the actual production over the last seven years has ranged between 40% and 60% of the capacity; the figures are:

Production of Paper (tonnes)

1972	1,603
1973	1,140
1974	1,765
1975	1,805
1976	1,750
1977	1,550
1978	1,380

Source: Papco Industries Limited

The factory is entirely dependent on imported pulp; it has not been able to get its full need because of the shortage of foreign exchange.

41. Machinery for another plant for producing mainly kraft paper was imported a few years back, but only about 80% of it has been installed. A proposal has also been under consideration for some time for setting up a plant for production of pulp from bagasse.

42. The factory was recently looted and is now left with practically no cash, raw materials, spares, office equipment, etc. Under the circumstances, the labour has been laid off for a month or so. Since some records are also missing, the position of financial resources is not clear, except that the company has been running at a loss over the last two years.

43. What is urgently required by the factory is foreign exchange for import of pulp (total annual requirements for fully utilising the capacity are estimated at Shs. 18m.), some chemicals, one or two vehicles and also local currency for paying wages, etc. Meanwhile, it would also be necessary to arrange funds required for replacement/renovation of calendering, drying and other machinery, completing the installation of the new plant referred to above and for preparing a feasibility/protect report on setting up a pulp making plant based on the quantity of bagasse likely to be available in the near future. However, in order to increase the production gradually, to over 2,000 tonnes over the next two years, provision of Shs. 10m. for 1979-80 and Shs. 18m. for 1980-81 is recommended.

(c) Distillery

44. The East African Distilleries, a subsidiary of the UDC, is the only distillery in the country. It produces waragi and enguli, semi-distilled alcohol produced largely from jaggery and, to a little extent, from cassava and molasses, by private brewers who supply it to the distillery. On an average, while waragi accounts for about 85% of the production, the balance consists of whisky, gin and brandy. The annual installed capacity of the distillery is 533,600 litres (or about 66,700 cases).

45. Unlike most other industrial undertakings, the distillery has been able to maintain a high level of production by working on a double-shift basis except during the last three years. The ex-factory price of a bottle of waragi is Shs. 130, half of which is accounted for by taxes. The figures are:

Production of Waragi
('000 Litres)

1970	564
1971	598
1972	729
1973	910
1974	814
1975	859
1976	543
1977	545
1978	420

Source: The Action Programme and the
East African Distilleries

46. Besides enguli, the other principal raw materials required are glass bottles, concentrates, seals, labels and filter sheets. Since the closure of the East African Glassworks a few years back which left some glass bottles available, the distillery has been dependent on used beer bottles. However, a shortage of beer bottles and foreign exchange for the import of the other raw materials has brought production down. The total foreign exchange requirements for fully utilising the capacity are estimated at Shs. 9m. (including about Shs. 3m. for bottles and Shs. 4m. for spare parts).

47. A contract was signed in November 1978 with a German firm for doubling the capacity and setting up a molasses-spirit factory, costing DM.7.8m., but the initial payment has not yet been made.

48. During the recent war, most of the spares, office equipment and furniture, etc., have been looted or damaged. However, the company has no other financial liabilities and it has been making net profits of nearly Shs. 9m. a year and has almost Shs. 16m. in cash.

49. The funds required for increasing the annual output to about 1m. litres on a double-shift basis over the next two years would bring more revenues to the Government and also help in bringing down the cost of production. At the same time, a decision may also be taken expeditiously about the contract already signed for expansion of the plant, taking into account the availability of molasses and the prospects of rehabilitating the glassworks.

3. ENGINEERING AND CHEMICAL INDUSTRIES

P.K. Sardana

50. This section is based on the empirical observations and data collected during visits to a dozen establishments in the engineering and chemical industrial sectors. As the sector-wide information was not available in Kampala, the visits were undertaken to representative, relatively large-sized industrial units which, in fact, constitute the core of industry in Uganda.

GENERAL OBSERVATIONS

51. At the outset, it may be necessary to mention a few observations common to most of the units.

- There has been no material damage in the recent fighting to any of the plants visited.
- The visits have convinced us that much more can be obtained from the existing productive apparatus than is currently being realised simply through better management.

- The inadequacy of managerial expertise, though not expressible in physical quantities, overrides the shortages of other inputs.
- Many of the chief executives and senior personnel did not appear to have a grasp of their unit's operations, let alone the characteristics of the industry in which they operate or the characteristics of their present and potential market.
- The estimates furnished for requirements or rehabilitation and reconstruction appear to be on the high side. In many cases, for example, the estimates of inputs were based on an output equal to the installed capacity. It is difficult to believe that a factory which is almost at a standstill because of one constraint or another can have full scale production (never attained in the past) within a period of 6-12 months. Besides, the figure for installed capacity has also become a notional one - the state of plant and machinery is such as to make the effective capacity available much lower than that originally installed. It would be wrong to work out any rehabilitation programme based on installed capacity figures which are no longer valid. Moreover, in the engineering industry particularly, the concept of production capacity is flexible and depends upon changes in product-mix.
- Given the above considerations of inadequate managerial expertise and past performance, the capacity effectively to absorb the entire quantum of financial and other assistance becomes doubtful.
- In most of the factories visited, the stocks of material inputs have either already run out or been fast depleted. There is not much in the pipeline and placement of fresh orders is yet to begin. As the period for which available stocks will last is much lower than the period of three to four months which a normal commercial transaction would take from placement of orders to actual receipt at the factory, the immediate outlook, even if the foreign exchange is available, is rather gloomy. Unless some emergency measures such as freighting of materials are undertaken, the prospects for industrial production in the next three to four months are far worse than the present picture.
- The long-term outlook is, however, reassuring. Uganda has the necessary factor inputs for industrialisation.

Given the financial resources and techno-managerial expertise and, more than anything else, a determined and visionary leadership, the country can make rapid strides towards industrial development.

ENGINEERING AND ALLIED INDUSTRIES

Steel Manufacturers of East Africa Limited, Jinja

52. This plant was set up in 1963 to produce about 30,000 tonnes per annum of finished steel products such as reinforcing bars, rolled steel angles and flats, bailing hoops, etc. The main feed material, scrap, was to be collected from all over East Africa.

53. During the 1960s, the consumption of iron and steel grew rapidly in the region, which led to the setting up of a number of steel rolling mills producing almost similar products and aiming at the same market. Table 11.8 gives the consumption figures for Uganda and East Africa as a whole.

Table 11.8

Consumption of Iron and Steel Products

Year	Uganda	East Africa
	('000 tonnes)	
1960	19.0	105.6
1964	23.8	111.1
1965	33.3	141.0
1966	30.4	135.6
1967	29.4	150.5
1968	35.8	147.4
1969	41.6	163.2

Source: East African Development Bank

While in the 1960s Uganda was the only country in East Africa with rolling facilities, the 1970s saw the setting up of five rolling mills - two of them using scrap as the principal feed material - in Kenya and Tanzania. This has led to a scarcity of scrap in the region. Because of this and other difficulties - such as the lack of maintenance and spare parts - the output of steel manufacturers has been declining since 1970.

1970 = 18,250 tonnes
 1975 = 12,000 tonnes
 1978 = 7,500 tonnes

Currently the rate of production is around 6,000 tonnes per annum.

Immediate Needs:

54. Presently, the main problems are:

- Poor availability of raw materials, especially scrap.
- Transport difficulties. The railway service for transporting scrap has not been satisfactory and the two lorries for transporting by road are inadequate.
- Lack of spare parts.

If the production is to be restored to a reasonable level of, say, 15,000 tonnes per annum, it will require about 22,000 tonnes of scrap. The present stocks are around 2,000 tonnes which will last for about a month only (at the production rate of 15,000 tonnes per annum). Assuming that 15,000 tonnes of scrap is imported at a price of Shs. 5000 per tonne as a supplement to what is indigenously available, the total foreign exchange requirement in 1979-80 for raw materials will be about Shs. 8m. Inclusive of requirements for equipment, the total assistance needed is of the order of Shs. 15m.

55. Since the Jinja plant is a supplier of basic material, any cut in production affects a multitude of industries dependent on it including those making such priority items as hoes, bailing hoops, etc. Therefore, the rehabilitation of this unit merits top priority.

Future Prospects:

56. For the development of the engineering industry in the country, it is necessary that there be adequate supplies of steel. The production of steel is characteristic for its economies of scale and high transportation costs. In view of the inadequate availability of scrap indigenously and the high cost of transporting it from outside, the suggestion of an integrated iron and steel complex should be seriously pursued.

Already it appears that over Shs. 2m. have been spent as consultants' fees in preparing a feasibility report for utilising Tororo ore, but without any results.

57. Presently, the Steel Works itself collects the scrap from various sources. It is suggested that the collection and supply of the scrap to the Steel Works should be undertaken by a separate agency or private contractors.

58. The product-mix of the company also merits examination. Most of the rolling mills in East Africa make the same type of products. It is suggested that, considering the total market size, the possibility of diversifying to other products be considered. An altered product-mix might also yield higher revenue.

Tororo Steel Works, Tororo

59. This Company, engaged mainly in the production of galvanised corrugated iron sheets, has an installed capacity of about 900 tonnes per month on a three shift basis. Its production performance since 1970 has been as follows:

<u>Year</u>	<u>Production in Tonnes</u>
1970	11,914
1971	13,413
1975	1,367
1976	1,064
1977	1,962
1978	807

Thus the production in the whole of 1978 (valued at Shs. 12m.) has been less than the installed capacity per month.

60. The factory has been closed since December 1978 because of the inadequacy of raw material supply, in particular, zinc. Besides the main feed material of cold rolled steel coils, the other inputs are ammonium chloride, hydrochloric acid and lead. Despite there being no operations for the last six months, the financial position is not too bad and the company has been paying salaries to its 700-odd employees.

Immediate Needs:

61. The present stock of raw materials is:

Cold rolled steel coils	= 330 tonnes
Ammonium Chloride	= 3 tonnes
Zinc	= nil
Lead	= nil

In the pipeline, stranded at Nairobi/Mombasa because of transport difficulties are:

Zinc	= 23 tonnes
Ammonium Chloride	= 63 tonnes

62. Assuming a production target of 6,500 tonnes of galvanised sheets, the requirements of raw materials per month would be:

540 tonnes Cold rolled steel coils	= Shs. 2.46m.
54 tonnes Zinc	= Shs. 0.45m.
Others	= Shs. 0.30m.
Total	= Shs. 2.95m.
or, say	<u>Shs. 3m.</u>

63. Assuming a lapse of a further two months without receipt of the necessary raw materials, the estimate of foreign exchange required for imports during 1979-80 is Shs. 30m. The estimated value of output would be about Shs. 100m. The company has sufficient spares to carry it through 1979-80.

Future Prospects:

64. The company's products are consumed by the construction industry. The rehabilitation of the economy will cause a spurt in building activity and thus a period of high demand for the company's products is foreseen. At full scale production (80% of capacity), the foreign exchange requirements for raw materials would be around Shs. 50m. per annum. The spare parts requirements are estimated to be about Shs. 0.1m. during 1980-81. The factory has large vacant covered areas which is a costly wastage. The management should consider ways of utilising this space in a productive manner.

Ugma Steel and Engineering Corporation Limited, Lugazi

65. Employing about 320 persons with a turnover of Shs. 10.4m. in 1978, this company has two main business components - agricultural implements such as hoes, pick axes, shovels etc. and the sugar machinery parts and other industrial machinery components. Being a subsidiary of the Sugar Works at Lugazi, it has been treated as a captive source of supply, with 70% of output going to the Sugar Works. As the price realised was below the market rate (sometimes not received at all), the company is now concentrating on outside sales, especially of hoes, to strengthen its cash position.

66. The stocks of steel ingots are fast being depleted and with no large supplies in sight, the production of hoes may have to be stopped. The cupola in the foundry needs its firebricks replacing.

67. A technical report prepared in December 1978 by UNIDO/UNDP experts puts the requirements of equipment at Shs. 25.5m. and of raw materials at Shs. 3.75m. in 1979.

Immediate Needs :

68. Besides the equipment replacement needs mentioned above, the requirements of raw materials during 1979-80 are estimated to be Shs. 1.5m.

69. In view of the large scale of hoe production at Uganda Hoes, it is suggested that production at Ugma be confined to other agricultural implements such as shovels, pick-axes, etc. for which the necessary dies are available.

Uganda Hoes Limited, Jinja

70. The production deterioration in this large scale manufacturer of hoes is depicted below.

<u>Year</u>	<u>No. of Hoes</u> ('000s)	<u>Value in Shs.m.</u>
1970	1,502.82	13.53
1971	1,370.08	12.34
1972	1,452.87	13.07
1973	1,205.50	10.85
1974	1,066.20	9.60
1975	752.63	12.04
1976	404.00	9.70
1977	375.20	9.00
1978	332.95	11.27

71. Interestingly, while the output has dropped to less than a quarter of what it used to be in the early 1970s, the turnover has remained more or less at the same level. However, the company went into the red in 1974 and is yet to recover.

72. The installed capacity of one operational line is 1.5m. hoes per annum on a two shift basis and 1.7m. on a three shift basis. The import of hoes during 1978 is estimated to be 0.4m. The size of the market is assessed to be about 1.5m. In view of the shortage, the ruling price is said to be four to six times the official price. The main reason for the fall in output is the shortage of raw material.

Immediate needs:

73. At the time of our visit, the stocks of flats obtainable from Steel Manufacturers of East Africa Limited, were estimated to be 20 tonnes, sufficient for the production of about 9,000 hoes only. Unless some emergency steps are taken the factory may have to be shut down. One possibility is the import of steel. But it may prove to be costly as about 22% of steel results in scrap and thus an unnecessary expenditure of one fifth on transportation would be incurred. (The scrap can, of course, be used at the Steel Works). The alternative is to import hoes. A decision will have to be taken by comparing the cost economies of these alternatives.

74. Tentatively, and given a low/no production during the next three months, depending upon the supplies from Steel Manufacturers and until the imported steel arrives, a target production of 0.5m. hoes in the three remaining quarters would require a foreign exchange of about Shs. 5.5m. for the import of steel. There are other problems such as the shortage of paints (presently hoes are being sold without varnish) and lack of some spare parts.

Future Prospects:

75. Even when the present line is underutilised because of shortage of the feedstock, a second line, costing Shs. 8m. and with a capacity of 1.3m. production per annum on a two shift basis and 1.6m. per annum on a three shift basis, has been installed. The heavy initial depreciation and possible unutilisation will add further to the financial burden of the company during 1979-80 and 1980-81.

Lamps Factory, Jinja

76. This factory, established in 1972-73, was taken over by the Uganda Electricity Board in 1974 under a State decree. The absence of a lamp technologist has hampered its operations since then. Against a reported installed capacity of 8,000 lamps a day, its production has varied from 0 to 2,500 a day. In 1978, the factory produced about 30,000 lamps of a value of about Sh.0.25m. (The average life of a lamp, which used to be in days and then weeks, has improved to be in months.)

77. The factory has been closed for some time because of the non-supply of water from the public system.

78. The company has stocks of raw materials enough for making 165,000 lamps - over five times the production achieved in 1978. In fact the stocks of glass shells may suffice for about 2m. bulbs. Thus there is no immediate requirement for foreign exchange for raw materials. About Shs. 0.15m. are needed for the import of spare parts for seal-exhaust and head-steam machines during 1979-80.

79. The critical needs are, however, for technical skills. A lamp technologist is urgently needed besides four machine operators and maintenance staff. In their absence, there is no bright prospect of rehabilitating the company.

Future Prospects:

80. The imported material content in a bulb is about Shs. 3. At a production rate of 0.5m. bulbs a year in 1980-81, this will mean a foreign exchange requirement of Shs. 1.5m. Because of inexperience, the wastage rate runs as high as 40%. Inclusive of some wastage and spare parts, the exchange requirement is assessed at Shs. 2.5m.

81. It appears that this factory has suffered from neglect and the lack of the requisite professional skills. The technology of manufacturing a bulb has nothing in common with that of generating a transmitting power. The marketing needs are also quite different. And so are the requirements of operations management. The advantages, if any, of the Uganda Electricity Board (UEB) running the lamp factory are not clear. It is suggested that the lamp factory be delinked from the Board and put under a new company. To strengthen the operational viability of the suggested Electrical Company, the relatively better operated UEB's Cable Works can also be put under it, provided the desired specifications are adhered to. UEB is amenable to the suggested course of action.

Tororo Cement Works, Tororo

82. Established in 1953, this factory has two kilns with capacities of 150 tonnes per day and 350 tonnes per day respectively, totalling 160,000 tonnes per annum. The production performance since 1967 is shown at Table 11.9. It will be seen that output in 1978 is hardly 10% of that obtaining 9-10 years earlier.

Table 11.9

Production at Tororo Cement Works			
Year	Cement	Lime	Aggregate
('000 tonnes)			
1967	140	-	-
1968	152.4	15.6	7.0
1969	170.2	17.9	6.2
1970	147.3	19.0	4.0
1971	143.4	15.5	6.3
1972	116.9	12.0	6.6
1973	75.7	9.3	13.9
1974	87.2	3.9	12.2
1975	47.2	0.9	7.0
1976	37.6	0.9	8.2
1977	31.3	Nil	5.9
1978	16.5	Nil	6.1

83. The reasons for such a slide in production are:

- Obsolete plant and equipment. The kiln I that was installed two and a half decades ago, was second hand.
- Lack of limestone due both to depletion in reserves and the inadequate quarry machinery.
- Difficulties in the transport of raw materials to the factory.

84. Despite the sharp decline in production, the financial position is not too bad - against a share capital of about Shs. 20 m., the general reserves stand at Shs. 28 m. Partly, this is due to the steep rise in the price of cement from Shs. 250 per tonne in 1970 to Shs. 1700 per tonne now.

85. Presently, the operations are almost at a standstill because of the non-availability of gypsum. The smaller, over-aged kiln I is being worked to some extent and the large-capacity kiln II is lying idle.

Immediate Needs:

86. Based on a production target of 53,600 tonnes of cement in 1979-80, the requirements of raw materials in foreign exchange have been worked out to be Shs. 2.3 m. This should be seen in conjunction with requirements of plant and equipment worth Shs. 7 m., Shs. 4.5 m. for the quarry and Shs. 2.5 m. for the factory.

Future Prospects:

87. It is believed that limestone deposits are fast running out. Before incurring any further capital expenditure, this aspect should be enquired into.

Universal Asbestos Manufacturing Company, Tororo

88. Located in the same compound as the Cement Works, this company is engaged in the production of asbestos and plastic sheets and pipes. The installed capacities are:

Asbestos sheets:	Machine I	=	30 tonnes per day
	Machine II	=	80 tonnes per day
Asbestos pipes		=	5 tonnes per day
Plastic sheeting		=	80,000 sq.m. per annum
Plastic pipes		=	40,000 kg. per annum of PVC pipes
			and 60,000 kg. per annum of polythene pipes

The production performance since 1967 is shown at Table 11.10

89. Presently, the plant is not working because of lack of cement. Interestingly, the cement used is either from Hima factory or imported from Kenya, as Tororo cement is not found to be suitable because of its poor setting characteristics. Generally, a mix of Tororo and outside cement in the proportion of 1:1 is used. In the past, almost three-quarters of production was exported to neighbouring countries. This was due to a lack of substantial building activity in the country. It is expected that with an up-surge in the construction sector, the bulk of the output of the plant would be absorbed by the domestic market in the near future.

Immediate Needs :

90. Besides cement to be obtained internally, the requirements of such other raw materials as asbestos fibre, PVC materials, plastic sheeting materials etc. are estimated to be worth Shs. 9.8 m. This is for a production level of about 6,500 tonnes of AC sheets and pipes, 72,000 kgs. of plastic pipes and 7,200 square metres of plastic

sheets. The bulk of the imports would be asbestos fibre amounting to over Shs. 8.9 m. On the equipment side, it is felt that, but for one fork lift truck, any other expenditure can be deferred for some time.

Table 11.10
Production at Asbestos Works

	AC Sheets and pipes in '000 tonnes	Plastic pipes in tonnes	Plastic sheets in '000 sq.m.
1967	9.37	5.78	18.62
1968	9.87	54.29	15.78
1969	8.39	182.76	9.62
1970	14.45	260.28	19.00
1971	13.54	116.25	18.00
1972	12.31	64.76	10.22
1973	5.49	67.98	10.35
1974	3.42	26.25	6.94
1975	2.59	56.59	2.94
1976	2.41	74.95	0.54
1977	1.85	52.67	Nil
1978	1.73	15.09	Nil

Future Prospects:

91. The company requires 15,000 tonnes of cement per annum and 2,000 tonnes of imported asbestos fibre costing Shs. 22 m. for a restoration of production to the 1970 level. The company's products have to compete with galvanised corrugated iron sheets. Which is to be promoted by the Government, should be determined by, among other factors, the quantum of foreign exchange - both recurring and capital - involved in each case.

Hima Cement Factory

92. Commissioned in 1970, the operating kiln I has a capacity of 300 tonnes per day amounting to 100,000 tonnes of clinker per annum. The production performance since 1970 is shown at Table 11.11.

Table 11.11
Production at Hima Cement Factory
(in '000 tonnes)

	Clinker	Cement
1970	43.56	45.87
1971	59.71	57.46
1972	42.01	39.00 (decreases due to roof collapse)
1973	65.37	66.38
1974	70.82	62.82
1975	42.38	50.24
1976	42.84	45.91
1977	38.52	40.14
1978	- around 13,000 tonnes -	

93. The number of employees has gone up from about 350 in 1973 to about 500 now. Presently, the daily production rate is around 160 tonnes. On the day of our visit, the factory was closed because there was no power from Kilembe mines station. There are

substantial limestone deposits nearby but the company faces difficulty in obtaining gypsum from abroad.

94. The work on the Phase II expansion with a kiln of 600 tonnes capacity per day - twice that of kiln I - was started in 1973 but even after a lapse of six years and heavy payments to overseas consultants which went on changing, the kiln is yet to be commissioned. During testing trials in December 1978, over Shs. 1 m. worth of equipment was damaged and the consultants left the scene.

Immediate Needs:

95. About Shs. 2 m. worth of spare parts are needed for resuming the normal production of phase I. The commissioning of phase II is estimated to require about Shs. 10 m. worth of equipment. But it is suggested that until supplies of imported raw materials are assured, the latter capital expenditure can be deferred. The unutilised kiln II will of course put a strain on the financial operations of the company.

96. The company also suffers from a lack of technical expertise. It is of surprise that even after a decade of operating a cement mill at Tororo, the country has not acquired the requisite skills of running a very similar mill. Foreign technical expertise is required for the commissioning of phase II. It is suggested that the utmost priority be given to the training and acquisition of operating skills during the next two to three years.

Future Prospects:

97. The restoration to normal production levels is dependent upon the supplies of imported gypsum which at a production rate of 250 tonnes of clinker per day (from Phase I) will cost about Shs. 1.8 m. per annum.

General Observations on the Cement Industry:

98. Considering the falling limestone deposits and the over-aged plant and equipment at Tororo as against the potential of local mineral reserves and the relatively modern plant at Hima, the latter will constitute the major source of supply of cement in the country. The only disadvantage will be the heavy transport cost - which amounts to nearly one-fifth of total cost - as the major consumption is in the Eastern region around Kampala.

99. The location of an asbestos plant at Tororo Cement Works seems to be an error in planning, as local cement is not entirely suitable for asbestos products and supplies have to be obtained from Hima/Kenya. Even if a 1:1 mix of Tororo and outside cement is to be used, it means outside supplies of about 7,000 tonnes of cement per annum concurrent transport costs.

100. The Tororo cement mills, for grinding clinker to cement, are in a more or less proper condition. It is suggested that clinker instead of cement should be brought from Hima for use at the asbestos works, which will save on transport costs. In view of the high consumption of cement in the Eastern region, it may be worthwhile to grind Hima's clinker at Tororo to save on transport costs. For the same reason, clinker rather than cement should be imported from Kenya, both to use the spare capacity at the cement mill and to save on transport costs.

101. It is suggested that at least the second yet-to-be operational line at the Asbestos Works be shifted to Hima, and asbestos sheets be made there, especially for catering to the needs of the Western and Southern regions.

Kishenyi Deposits

102. There appear to be large reserves of hematite ore containing about 70% iron at Kishenyi, south of Kabale. The region is not easily accessible and heavy capital expenditure would have to be incurred. But its importance in the industrialisation programme of Uganda cannot be underrated. Instead of transporting this ore to an integrated iron and steel complex at Jinja, it may be better to have a pelletisation plant at Kabale and then transport the pellets to the steel works. It is suggested that preliminary steps for a feasibility study be taken.

RUBBER PRODUCTS, CHEMICAL AND ALLIED INDUSTRIES

Dunlop (E.A.) Ltd., Jinja

103. This company was taken over by the Government in 1972. Its products are bicycle tyres and tubes, rubber solution and adhesive. Employing 160 persons, it produced 300,000 tyres and 450,000 tubes in 1978, with a turnover of around Shs. 10 m. The rated capacity is said to be 1 m. tyres and 1.4 m. tubes but the actual capacity is not likely to exceed 0.5 m. tyres and 1 m. tubes on a two shift basis.

Immediate Needs:

104. Currently, the factory is operating on one shift only because of shortage of the main raw material, rubber. Its present stock of 18,692 kg. might suffice for 50,000 tyres and tubes. This can take the production up to another month at a daily rate of 2,000, or longer if the production rate is reduced. Since there is nothing in the pipeline and it will take three to four months before the materials arrive, if ordered now, there is the prospect of its being shut for the next three months unless rubber is urgently obtained. Other stocks are not so critical, especially that of sulphur and titanium dioxide which might last for several years.

105. For producing 400,000 tyres and 700,000 tubes in 1979-80 - in consonance with the objective of restoring the normal production level - about Shs. 2 m. worth of rubber would have to be imported.

Future Prospects:

106. Raw materials worth Shs. 6 m. per annum will be required for normal scale production. The spare parts requirements are assessed at Shs. 4 m.

Tororo Industrial Chemicals and Fertilisers Limited, Tororo

107. TICAF was set up in 1962 with the participation of ICI Ltd. which pulled out later. This very antiquated plant has a rated capacity of 25,000 tonnes of single superphosphates per annum. The production has dropped from 24,800 tonnes in 1970 to 14,100 tonnes in 1975. The plant has not been functioning for the last two years. The plant for making insecticides such as cotton dip has been closed for a long time.

108. Phosphates are mined locally and sulphur is imported for making sulphuric acid. The plant is in very bad state and will require much replacement of machinery. In the past about 80% of production was exported to Kenya and Tanzania. The imports of complex fertilisers amount to over Shs. 6 m.

Immediate Needs:

109. The requirements of plant and equipment are assessed at Shs. 7 m. by a German team of consultants. There appears to be enough sulphur for six months' production. Assuming that the factory runs for only six months in 1979-80, the requirements of other materials are assessed at Shs. 1 m.

Future Prospects:

110. For normal scale annual production of 20,000 tonnes, the requirements of raw materials in foreign exchange would be around Shs. 6 m.

General:

111. It has been suggested that the bulk of the resumed production will be exported to Kenya. The market is felt to be assured as TICAF is the only producer of single superphosphates in East Africa. The company expects to earn profit at a production rate of 20,000 tonnes per annum in view of high price of about Shs. 1,000 per tonne and the cheap availability of phosphates. However, it will require a good deal of foreign exchange before the plant could be started and pushed up to 80% capacity utilisation.

We are not convinced that the company will emerge a net foreign exchange earner within the next two years. The matter, therefore, needs further examination before any rehabilitation programme can be recommended. In the interim, it may be worthwhile to repair the acid plant only, at a cost of about Shs. 1.5 m. and process the sulphuric acid there.

Kalamu Limited, Tororo

112. This company, a subsidiary of Tororo Steel Works for historical reasons, is engaged in making two brands of ball pens, 'Bip' and 'Rocket', the combined rated capacity of which is 18 millions per annum on a three shift basis - more than the population of Uganda. A large domestic market is not foreseen. The effective capacity is assessed to be much less.

113. The factory has been closed since February 1979 because of a blunder in operations planning. There are sufficient stocks of 'Bip' refills but the relevant mould is out of order, whereas there are no refills for 'Rocket' type whose mould is working. There are more than enough stocks of other raw materials such as polystyrene and stafflene.

Immediate Needs:

114. These are assessed at Shs. 0.5 m. each for the refills and the mould for a production of 5 m. ball pens in 1979-80.

Future Prospects :

115. Raw materials worth Shs. 5 m. per annum are required for producing about 7-8 m. ball pens a year.

Lake Katwe Salt Project

116. This is a new project for producing 45,000 tonnes per annum of sodium chloride and 7,000 tonnes per annum of potassium chloride. 500 tonnes per annum of sulphur will also be produced which can be supplied to TICAF. From the material dumped, the soda ash and caustic soda can be processed later. The total cost of the project is Shs. 150 m. with Shs. 100 m. in foreign exchange. The plant is likely to be commissioned in a few months and is expected to save foreign exchange worth Shs. 50 m. in 1979-80.

117. It is suggested that sulphur from this project be used for making sulphuric acid at the Tororo plant during the interim period before the latter is completely rehabilitated. A 20 km. road link is required for connecting the project site to the main highway (see paper on transportation). The project will use fuel oil for generating process steam etc., the cost of which may be Shs. 10 m. per annum. To save this recurring burden on foreign exchange, it is suggested that the conversion of the fuel oil system to use cheap, local electric power be seriously examined.

118. The plant is likely to be run by foreign technicians for the first three years. During this period, high priority ought to be given to training.

Recommendations

119. A summary of our recommendations is contained in Table 11.12.

Table 11.12
Summary and Recommendations for Engineering and Allied Industries

Foreign Exchange Requirements					(Figs. in Shs. m.)
ENTERPRISE	REQUIREMENTS IN 1979-80		REQUIREMENTS IN 1980-81		REMARKS
	Raw Materials	Spare Parts	Raw Materials	Plant & Equipment	
1. a. Steel Manufacturers of East Africa Ltd. Jinja	8	-	na	na	High priority; factory faces closure. Any slow down in this company has a chain effect in entire industry
b. Imports of billets/steel to supplement input to engineering industries	8	-	na	na	
2. Tororo Steel Works	30	-	50	0.1	Market to be shared with asbestos products. High priority.
3. Uganda Steel & Eng. Corp. Limited, Lugazi	1.5	25	na	na	Comprehensive programme can be delayed.
4. Uganda Hoes Ltd., Jinja	5.5	-	na	na	High priority; factory faces closure.
5. Lamps Factory, Jinja	-	0.15	2.5	na	Needs immediate technical assistance.
6. Tororo Cement Factory, Tororo	5	-	na	na	Rehabilitation can be delayed.
7. Universal Asbestos Manuf. Co. Ltd., Tororo	9.8	-	22	-	Reorganisation needed
8. Hima Cement Factory Hima - Jasese	5	12	1.8	6	High priority to Phase I production. Equipment needs of Shs. 12 m. in 1979-80 include Shs. 10m. for Phase II completion - low priority.
9. Dunlop (E.A.) Ltd. Jinja	2	-	6	4	Raw material to be rushed. Factory faces shut-down.
10. Tororo Industrial Chemicals & Fertilizers Ltd., Tororo	1	7	6	na	Further examination needed.
11. Kalamu Limited, Tororo	0.5	0.5	3	-	Low priority
	Total	72.3	60.65	91.3	10.1
	Say	72	61		

Notes: a) na = not assessed. The extent of requirements in 1980-81 will be dependent upon the degree of rehabilitation achieved in the previous year.

b) Wherever appropriate, a period of no/low production has been taken into account.

120. Expected Output Level

With the above estimated financial and technical assistance materialising during 1979-80, the output scenario of industries is expected to be as in Table 11.13.

Table 11.13
Output of Industries 1979-80

Enterprise	Unit	ACTUAL 1970	OUTPUT IN 1978	ESTIMATED OUTPUT IN 1979-80
1. Steel Manufacturers of East Africa Limited, Jinja (steel material)	'000 tonnes	18.25	7.5	15.0
2. Tororo Steel Works, Tororo (galvanised corrugated iron sheet)	'000 tonnes	11.91	0.81	6.5
3. Ugma Steel and Engineering Corporation Limited, Lugazi	sh.m	7	10.4	
4. Uganda Hoes Limited, Jinja (hoes)	'000 nos	1503	555	500
5. Lamps Factory, Jinja (plastic bulbs)	'000 nos	-	30	165
6. Tororo Cement Works Tororo (cement)	'000 tonnes	147.5	16.5	53.6
7. Universal Asbestos Manufacturing Co. Limited, Tororo				
i. Asbestos Cement sheets/pipes	'000 tonnes	14.45	1.75	6.5
ii. Plastic pipes	tonnes	260.28	15.09	72
iii. Plastic sheets	'000 sq.m.	19.00	Nil	7.2
8. Hima Cement Works, Hima (cement)	'000 tonnes	45.8	15	60
9. Dunlop (E.A.) Limited Jinja				
i. Tyres	'000 nos	-	300	400
ii. Tubes	'000 nos	-	450	750
10. Tororo Industrial Chemicals & Fertilizers Ltd. Tororo (single super-phosphates)	'000 tonnes	24.8	Nil	-
11. Kalamu Limited Tororo (ball point pens)	m. nos	-	-	5

At current prices, the value of the above estimated output in 1979-80 is likely to be around Shs. 450-500m.

121. Details of our recommendations are as follows:

1. Of highest priority are the basic steel and cement industries. The reconstruction programme of the economy will be affected if adequate quantities of these materials are not made available. A sharp upsurge in the demand of these products is foreseen within the next two year period of rehabilitation.

2. In the steel industry, it is suggested that:

- scrap is efficiently collected from within Uganda (especially since the recent fighting must have generated this material!)
- an increase in output be made possible through imports of scrap and if need be, through imports of billets.
- urgent steps be initiated to set up an integrated plant in view of the local availability of iron ore, especially at the Kishenyi deposits.
- the product-mix be diversified.

3. In the cement industry, it is recommended that:

- a) gypsum be imported on an urgent basis for producing cement.
- b) clinker be transported from Hima to Tororo for grinding there with a two-fold objective - to supply the adjoining asbestos works and to meet the requirements of the surrounding region. This will save on transportation costs.
- c) if need be, clinker instead of cement be imported from neighbouring countries.
- d) the capital rehabilitation programme of Tororo Works can be delayed, pending an assessment of dwindling deposits there.
- e) the second manufacturing line at Asbestos Works (involving a few employees only) be transferred to Hima for producing asbestos cement sheets there.

4. Uganda Hoes, Dunlop (E.A.) Ltd., and Uganda Bags Ltd. - all making priority items - face prospects of closure for at least three months unless raw materials of steel, rubber and jute are urgently provided.

5. Operations management needs considerable improvement. Areas of particular and immediate importance are the inventory management and the establishment of repair and maintenance schedules.

6. Product rationalisation be achieved between the two units making agricultural implements. A suggested course of action is for Uganda Hoes Limited to mass produce hoes only, while Ugma Engineering Works can concentrate on manufacturing all other agricultural implements.

7. The immediate need of the lamps factory is technical assistance.

8. The operations of Ugma Works and the lamps factory be delinked from the Uganda Sugar Works and Uganda Electricity Board respectively - the first has suffered from exploitation and the second from neglect.

9. We are not convinced that TICAF will become a net earner of foreign exchange within the next two years. The rehabilitation programme of this company can be delayed pending a look into its operational viability. In the meantime, its acid plant can be made operational to produce sulphuric acid from existing stocks of sulphur.

10. In all major cases of where technical know-how from abroad is sought, a technology transfer plan be prepared to effectively absorb and if necessary adapt such know-how. Particularly in cases of extended foreign technical assistance programmes, the training and development of local personnel to acquire the requisite skills should be accorded a very high priority.

4. WOOD INDUSTRIES

S. Montsi

Forestry

122. There are about 1.5 m. ha. reserved for forestry in Uganda. About 48% is tropical high forests and 51% savannah woodland. The latter includes some 26,000 ha. of plantation forests. The savannah woodland is an important source of round wood for fuel wood and poles in the rural non-monetary sector. Commercial timber relies on tropical forests and plantations. The first and second plans envisaged extensions of about 20,000 ha. in plantations. But less than half of the target was achieved. The third plan had a 10,000 ha. target. After about half of this target was achieved the Norwegian bilateral loan agreement was cancelled and the programme came to a standstill. Nothing of significance has been done since.

123. It is estimated that about 11 m. cubic m. of fuel wood was used in the non-monetised sector for fuel wood and poles in 1976. The off-take is said to rise with an increase in population. It is estimated that by the year 2000 about 30 m. cubic m. will be required for the needs of this sector. The forestry department advises that present forests, even under the best management, would not be able to supply all industrial needs by the mid 1990s. The problem could arise earlier if industrial expansion was experienced. To avoid this eventuality the Forestry Department estimates that some extra 40,000 ha. would have to be planted. They estimate the cost of planting one ha. at Shs. 2,100. They would, therefore, require some Shs. 84 m. for the programme. The foreign exchange component of this estimate is Shs. 18 m. The programme would take 12 years, implying an average annual requirement of Shs. 7 m., Shs. 1.5 m. of which would be foreign exchange.

Production of Processed Wood

124. Up till 1973 all production and processing of forest based products was in private hands. In 1974 Government established the Wood Industries Corporation (WICO). The corporation is responsible for almost all processing of forest products in the country. There are, however, some 23 small private saw mills, all owned by Ugandans and about 300 registered pit-sawyers. The latter produce rough sawn timber which is sufficient for building and other needs in the rural areas.

125. WICO operates a plywood and veneer factory with a 340,000 sq. metres pa. capacity. The Corporation also operates a chipboard unit with annual capacity of 4,100 cu. m. No reliable figures for production exist before 1973. WICO records reveal a declining production trend since 1973. In 1978, production of sawnwood is estimated at 16,500 cu. m., about 55% of capacity. The plywood factory operated at 47% of capacity producing about 161,000 sq. m. of plywood. Chipboard production was only 198 cu. m. or 4.8% of capacity (see Table 11.14)

126. The difficulties that faced this industry are threefold. First there was a shortage of logs. Because of the ever shrinking value of the Ugandan shilling many saw-mill owners and labourers found it more rewarding to revert to subsistence farming than stay in the sawmills. Lack of parts made it difficult to maintain mills in a good state of repair. Many sawmills had no alternative but to close down. Secondly there were problems of transporting logs to the factories. No new vehicles could be bought nor could spare parts be obtained to repair old ones because of foreign exchange problems. At times petrol and diesel were not available. Difficulties experienced at the factories were mainly managerial and those relating to old machinery and lack of spare

parts. The people running the companies were not experienced in the business, and had difficulty keeping the companies afloat. The deteriorating economic position of Uganda did not help. Most machines inherited by WICO were old and obsolete and required expensive maintenance. The unavailability of foreign exchange to purchase spare parts made it impossible to maintain the machines in a reasonable state of repair, and this exacerbated the problem.

Table 11.14
Recorded Production of Sawnwood, Plywood and Chipboard

Year	Sawnwood Capacity: 47,000 annual cu.m. (000 cu.m.)	Plywood Annual Capacity (000 sq.m.)	Chipboard Annual Capacity: (cu.m.)
1973	43.7	257.0	900
1974	30.0	266.0	357
1975	24.0	280.0	314
1976	21.1	240.0	220
1977	16.6	213.0	
1978	16.3	161.0	198

Source: WICO

Source: WICO

127. The problems outlined above applied also to the furniture industry. This sub-sector faced the additional difficulty of shortage of imported materials, such as glues, fabric, foam sheets, and finishing materials. As a result shortages of furniture were experienced countrywide, and this led to an escalation of prices.

War Damage

128. Fortunately forests were not affected by the war; most damage was confined to the cities. Vehicles, furniture and fittings, operational equipment such as typewriters, and a few small finished products were looted. Work on the Budongo Plywood and Veneer factory was not completed.

Issues and Resources

129. Management could not provide consumption figures, but they believe that there is a large unsatisfied market for their products. They expect the market to rise fairly sharply as reconstruction gains momentum. The immediate need is to put existing factories back into operation - first, the sawmills that had stopped producing logs or scaled down their operation, need to be revived. Approximately Shs. 2.6 m. is required in foreign exchange for this exercise. To revive the Plywood factory, the chipboard plant and the furniture workshop, Shs. 4.5 m., Shs. 6 m., and Shs. 0.65 m. respectively is required, all in foreign exchange. About Shs. 18.1 m. is requested for transport and haulage, and Shs. 78.5 m. for raw materials and working capital, Shs. 2.4 m. of this in foreign exchange.

130. The request for Shs. 78.5 m. for raw materials and working capital needs scrutiny. Time constraints did not allow detailed analysis of this request. Management agreed, however, that the Shs. 0.64 m. for cars should be given low priority. It is, therefore, not included in the two year emergency programme in Table 11.15 below. From field visits to two of the units ran by WICO, and from reports by officials in Kampala it seems the rest of the requests are justified. In the factory at Jinja I could not get any financial reports nor audits. Lack of such reports is in my view a serious omission by management. I would recommend, therefore, that management in this unit be carefully assessed and strengthened accordingly.

Intermaterial Assistance

151. The Forestry Department requests are two fold. First they request some Shs. 5m., Shs. 5 m. of which is foreign exchange for determining the quantity of trees suitable for making plywood in Mabira forest reserve. They are also anxious for the programme to expand plantations to be resumed. The former programme is included in the 1979/80 programme whereas the latter is included in the 1980/81 plan. The Norwegians could be asked to revive the plantation programme that had to stop a few years back. Assistance in the form of soft loans for the foreign exchange component of WICO needs should be considered. All assistance should be channelled through an institution that has the capacity carefully to consider WICO's request in detail and supervise progress. Either the East African Development Bank or the rehabilitated Uganda Development Corporation could play this role. Table 11.15 below aggregates the funds required.

Table 11.15
Funds Required for Forests and WICO

Programme	1979/80 (Shs. m)		1980/81	
	Total	Foreign Exchange	Total	Foreign Exchange
Forestry Department	.5	.5	7.0	1.5
Saw Mills	2.6	2.6	-	-
Plywood Mill	4.5	4.5	-	-
Chipboard Plant	.6	.6	-	-
Furniture Plant	.65	.65	.65	.65
Log Haulage and other Transport	17.46	17.46	-	-
Raw Material and Capital	78.5	2.4	-	-
Total	104.79	28.49	7.65	2.15

5. BUILDING MATERIALS

P. K. Sardana

151. This section presents a general overview of the building materials industry in Uganda, including its performance and problems during the decade 1969 - 79, assesses the needs for immediate reconstruction and rehabilitation during 1979 - 80 and takes a look at the future development.¹

GENERAL OVERVIEW

Coverage

152. The building materials industry in Uganda manufactures:-

-iron and steel products like corrugated iron sheets, reinforcing bars, wire nails, pipes and fittings etc.

-clay and clay products like baked bricks and roofing tiles.

-cement and cement products like asbestos sheets & pipes

¹ This note is based on information furnished to the Team by the sub-committee on Building Materials. About a dozen major industrial enterprises, including those engaged in manufacturing building materials, were visited and discussions held with the operating personnel. The report based on this field investigation making recommendations for each such enterprise is contained in a separate paper.

- paint , and
- timber and timber industries.

Market

133. Most of the production is consumed within the country and exports are negligible. Within the domestic market, there are three major target segments:

- Government agencies like the Ministry of National Reconstruction and Rehabilitation and the District Administration;
- National Housing Construction Corporation
- Private building contractors and individuals.

Structure of the Industry

134. Most of the manufacturing establishments, especially in the steel and cement industries, are the large-sized (by Ugandan standards) public sector units. Their locations are mainly in the southern, south-eastern and western parts of the country because of the basic raw materials. A certain degree of integration exists within the industry, for example, the production of cement from the raw materials and the manufacture of asbestos sheets and pipes from this cement. There is no integrated complex in the steel industry stretching from iron ore processing to finished steel products but the linkage between the steel and engineering units does exist.

The Period 1970 - 79

135. Many of the firms engaged in the manufacture of building materials were once wholly or partly owned by non-citizen Asians. Following their expulsion in 1972, some of these firms were allocated to Ugandans while others were put collectively under the newly organised corporations. The inadequate expertise at managerial and functional levels resulted in a decline in capacity utilisation and a general deterioration in operational efficiency. Plant and equipment was also very old necessitating heavy maintenance expenditure. Coupled with the constraints of foreign exchange availability to import raw materials and spare parts, many of these enterprises have come to a virtual stand-still stage.

ASSESSMENT OF THE MAJOR INDUSTRIES

136. Subsequent paragraphs describe the following major industries, assess their immediate needs, and put forward plans for the future development.

Iron and Steel Industry
Cement Industry
Clay and Clay products
Paints Industry

Iron and Steel Industry

137. The set-up and activities of Uganda Steel Corporation - the virtual owner of the iron and steel industry in Uganda are outlined in Annex 11.4.

Present Status:

138. As far as pipes and fittings are concerned, all galvanised water pipes and fittings are imported from neighbouring countries. The cast iron long and short drainage pipes, manhole covers etc. are produced at Ugma Steel and Engineering Works. Casement products like windows and doors, barbed wire etc. are manufactured by Casements (Africa) Limited, Kampala.

Immediate Needs:

139. The problems facing the Uganda Steel Corporation, the Ugma Engineering Works and Casements Limited are mainly due to the shortage of raw materials and spare parts and the obsolete machinery.

140. The foreign exchange requirements of Steel Manufacturers of East Africa Limited, Tororo Steel Works, Uganda Hoes Limited and Ugma Steel & Engineering Corporation Limited have been assessed in the section on engineering and chemicals industries. The estimates of annual foreign exchange requirements for raw materials and spare parts by other companies are as follows:

	(in Shs. m.)
Uganda Baati Limited	15
Uganda Metal Products and Enamelling Company Limited	18
Uganda Metal Industries Limited	20
E. A. Steel Products Limited	12
Uganda Steel Corporation Depot	2
The Casements (Africa) Limited	35
	102

Future Prospects:

141. Presently, the Steel Manufacturers of East Africa Limited produce steel by using scrap as the feed input. In view of the limited supplies of scrap, it is intended to supplement it with the processing of iron ore. An amount of Shs. 135 m. in foreign exchange is envisaged on this account.

142. Uganda Metal Industries Limited and E. A. Steel Products Limited have planned immediate expansion which will require Shs. 16 m. and Shs. 14 m. respectively in foreign exchange.

The Cement Industry

143. The Uganda Cement Corporation, representing the cement industry of Uganda, has the following factories under it:

Tororo Cement Works
Hima Cement Works
Universal Asbestos Manufacturing Company
and Spun-pipe Construction Company

144. The first three plants were visited and an assessment of their needs in 1979-80 as well as the future prospects is presented in the section on engineering and chemical industries above. The aggregate amount of foreign exchange required by the cement industry in 1979 - 80 is estimated to be around Shs. 55 m. inclusive of Shs. 10 m. for commissioning phase II of Hima Works.

Clay and Clay Products

145. The main company producing products such as bricks and roofing tiles is Uganda Clays, near Kampala. Also, there are a number of small scale producers.

Present Status:

146. Uganda Clays produced about 29,000 tonnes of clay products in 1969. Nine years later, the production stood at 14,000 tonnes. The fall has been attributed to the lack of spare parts.

Immediate Needs:

147. A sum of Shs. 4 m. in foreign exchange has been assessed for Uganda Clays as the requirement for importing spare parts during 1979 - 80. The rehabilitation needs of other small producers are estimated to be Shs. 5 m. in foreign exchange.

Future Prospects:

148. Messrs. Westomat, the technical managers of Uganda Clays are studying the feasibility of setting up another clay products plant in Southern Uganda. The estimated cost is Shs. 16 m. out of which the foreign exchange component is likely to be Shs. 15 m.

The Paints Industry

149. There are two firms producing water and oil paints as well as putty and adhesive for the domestic market.

Immediate Needs:

150. A sum of Shs. 16.95 m. in foreign exchange has been proposed for procurement of raw materials and replacement of equipment lost during the recent fighting:-

	Shs. m.
Raw materials for paints, putty and adhesives	15.12
Spare parts, scales, brushes etc.	1.53
Miscellaneous items - office stationery, advertising materials and delivery vehicles	0.30
	<u>16.95</u>

SUMMARY

151. A summary of our recommendations is contained in Table 11.16.

Table 11.16
Summary of Recommendations and Immediate Requirements

Industry	Total Requirements	Local Funds	Foreign Exchange Component	Remarks
Iron and Steel Products	141.80	39.8	102.00	-
Cement and Cement Products	-	-	-	Assessed in report on engineering and chemical industries
Clay and Clay Products	9.00	-	9.00	-
Paints	16.95	-	16.95	-
TOTAL	167.75	39.8	127.95	

152. Thus an immediate assistance of about Shs. 128 m. in foreign exchange is required as estimated by the sub-committee on Building Materials.

153. In the entire exercise of assessing the aid requirements, the injection of financial inputs has not been linked with the corresponding improvement in performance in terms of increased output, profitability etc. Therefore, it becomes difficult to say what the picture will be if a certain amount is expanded or not. Non-optional utilisation of resources is a possibility. But it goes without saying that in the period of rehabilitation and reconstruction, the building materials industry has to be accorded utmost priority.

Production of Yarn and Cloth

(Yarn: m.kgs - Cloth: m.l.mts)

	<u>Spinning</u> <u>Mill</u> ¹	<u>Nyanza</u>		<u>Pamba</u>		<u>Rayon</u>		<u>African</u>	
	Yarn	Yarn	Cloth	Yarn	Cloth	Yarn	Cloth	Yarn	Cloth
1970	-								
1971	-		27.4	-	11.0		3.1	-	9.1
1972	-		28.4	-	12.5		2.4		8.9
1973	-		23.6	-	9.5		1.6		5.4
1974	0.28	4.9	22.6	1.8	9.7	0.8	1.7	0.6	4.1
1975	0.94	3.8	21.8	1.8	9.5	0.3	2.3	0.8	5.3
1976	1.48	3.6	25.0	1.4	9.2	0.3	2.4	1.0	6.3
1977	1.55	3.3	25.8	1.4	7.6	0.2	1.8	0.9	5.4
1978	1.54	2.4	21.0	0.7	4.5	0.5	1.2	0.6	3.6

¹ Established in 1968 and started production in 1974.

Source: National Textile Board

N T B's Estimates of Financial Requirements for 1979/80
(Shs. m.)

Spinning & Weaving Mills	Machinery & Spare Parts		Raw Materials	
	Foreign Exchange	Local	Foreign Exchange	Local
1. Spinning	4.5	-	-	4.2
2. Nyanza	7.0	-	5.0	-
3. Pamba	6.0	-	5.0	9.0
4. Rayon	1.5	-	3.0	2.5
5. African	5.0	-	6.0	8.0
6. UGIL	16.0	-	27.0	-
7. U. Garments	-	-	2.0	-
8. Blankets	7.8	-	18.0	-
9. Hessian & Jute	2.0	-	6.0	-

Data on Oil and SoapI. OIL AND CAKEEstimated Annual Capacity

<u>Mills (Working)</u>	<u>Cotton Seeds Crushing (Tonnes)</u>	<u>Oil (Tonnes)</u>	<u>Cake (Tonnes)</u>
1. Kakira Oil Mill	31,680	3,992	15,840
2. OK Oil Mill	24,460	3,105	12,320
3. Iganga Industries	15,840	1,996	7,920
4. Busembatia Oil Mill	13,200	1,663	6,100
5. New Budaka Mill	7,920	997	3,960
6. New Alliance Oil Indus.	7,920	997	3,960
7. Supersonic Mill	4,600	580	2,000
8. Tororo Oil and Soap	2,640	333	1,320
9. Arapai Oil Mill	2,112	266	1,056
10. Anguruma Oil & Soap Indus.	1,760	222	880
11. E.A. Oil Industries	1,680	212	840
	<u>113,992</u>	<u>14,263</u>	<u>56,496</u>

II. SOAPEstimated Annual Capacity

	(Tonnes)
1. Nakasero Soap Works	6,000
2. Kakira Oil Mill	2,704
3. Iganga Industries	1,560
4. New Budaka Mill	1,560
5. Tororo Oil and Soap	730
6. Anguruma	171
7. OK Mill	100
8. E.A. Oil Industries	<u>20</u>
	<u>12,845</u>

Source: Lint Marketing Board.

Uganda Steel Corporation: Subsidiary Companies, Main Products
and Foreign Exchange Requirements

Former Name	New Name	Location	Main Products	Annual Foreign Exchange Reqmts Shs. m.	
				Raw Mtls. & Spres	Planned Immediate Expansion
Steel Corporation of E.A.	Steel Manufacturers of E. A. Limited	Jinja	Reinforcing bars, rods, small sections, wire cast billets, strip (for cotton bales) mainly from scrap metal as raw materials, bolts and nuts.	18	
Chillington Tool of E.A. Ltd.	Uganda Hoes Limited	Jinja	Forged hoes	10	4
Uganda Steel Limited	Tororo Steel Works Ltd.	Tororo	Corrugated galvanised roofing sheets.	9	
Uganda Baati Limited	No change	Kampala	Corrugated galvanised roofing sheets and forged metal house- hold appliances.	15	
Uganda Metal Products & Enamelling Company Limited	No change	Kampala	Enamelware, beds, mattresses & hospital equipment.	18	
Uganda Metal Industries Ltd.	No change	Jinja	Galvanised chain link fencing from imported galvanised wire and barbed wire.	5	15.67

Uganda Steel Corporation

Former Name	New Name	Location	Main Products	Annual Foreign Exchange Require- ments Shs. m.	Raw Materials and spares	Planned Immediate expansion
E. A. Steel Products Ltd.	No change	Jinja	Welded Steel tubes and Conduits	12	14	
Emco Steel & Metal Corp. Ltd.	Uganda Steel Corp. Depot	Kampala	Training and importers of finished products not produced by the companies of the Corporation	5	-	

PAPER 12

MINERALS¹

Ruckia Ikunisi

ROOTS OF CURRENT PROBLEMS

The major mineral is copper, mined at Kilembe and processed at Jinja. Other minerals of economic importance are wolfram (tungsten), beryl, tin, apatite, gold, and bismuth, mined by small miners scattered all over the country with a heavy concentration in Ankole and Kigezi Districts in south-western Uganda. In addition the bulk of the country's limestone - used mainly for the supply of lime to cement factories - is mined at Tororo and Hima.

2. No physical war damage took place at either the copper mines or the smelter but the company lost some vehicles, tools and a bulldozer through looting. Through looting too, most small mines lost their machinery and equipment and their houses were extensively damaged. Similarly the Geological Survey and Mines Department at Entebbe lost most of its equipment and fittings in its offices and six laboratories including mining machinery and equipment in the field as well as vehicles.

3. During the past nine years the mineral sector in general has witnessed a steady decline in production (see Annex 12.1) and export sales because of various problems. First is the lack of adequate funds, both in foreign and local currency, to replace very old and worn-out machinery and equipment and to buy essential supplies such as spares, chemicals, tools, explosives, etc. Also there has been a lack of any local organised marketing system to buy and sell minerals produced by small mines, and a lack of adequate transport facilities. High labour costs resulting from the demand of the mine workers for a minimum wage of Shs. 450, instead of the statutory minimum wage of Shs. 240 have limited increased production.

4. Externally and internally too the general condition requiring all transactions, foreign and local, to be made by cash has resulted in a general acute shortage of funds available for capital and working capital requirements. The break-up of the East African Community, among other things, has had the net effect of increasing freight charges, and producing considerable delays in delivery of essential imports and exports.

POLICIES AND RESOURCES NEEDED

Geological Survey and Mines Department

5. Under these circumstances a return to the 1970 level of operations, starting with the Geological Survey and Mines Department, would involve the re-equipment of the six laboratories at Entebbe, the replacement of lost mining machinery, equipment and vehicles, and recruitment of key qualified and experienced staff. This would enable the Department to continue with its work on geological surveys and mineral exploration besides giving technical support services to the small mines. The equipment of the six laboratories will require a total sum of Shs. 1.4m., all in foreign exchange whereas the replacement of lost machinery, equipment and vehicles will involve a sum of Shs. 10 m., all again in foreign exchange. Also, in order to strengthen its establishment, a Principal Geologist, a Mining Engineer, a Mineral Technologist, a Petrologist and a Driller Instructor are immediately required. At the same time, there is a need to train 11 Geologists and four Mining Engineers.

1 Report is based on written material and discussions with the Acting Commissioner for Geological Surveys and Mines, the Management of Uganda Development Corporation, Bjordal Mines Ltd. and Kilembe Mines Ltd.

Small Mines.

6. It has not been possible to obtain adequate information on the operations and needs of small mines. However, given the problems they have been facing over the past nine years, there is no doubt that their main requirements are provision of mining machinery and equipment, besides provision of improved transport facilities, particularly between the areas where the mines are located and the buying centre. Their working capital requirement is estimated to be in the region of Shs. 8m., Shs. 6m. of which will be in foreign exchange. In addition to all this, there is an urgent need to set up a local organised marketing system to buy and sell minerals produced by the small miners.

Itama Mines Ltd.

7. During the period 1940 - 72, the small miners sold their minerals to the British Metal Corporation based at Kikagati. When the British Metal Corporation closed their operations towards the end of 1972, the Government directed the Uganda Development Corporation Ltd. (UDC) to take over this function and UDC, through its then dormant company, Itama Mines Ltd. started to buy and sell minerals in February 1973. The major minerals which were bought and sold by this company were tin, wolfram, beryl, tantalite and columbite.

8. Itama Mines Ltd. carried out this functions from February 1973 to April 1976, when financial difficulties forced it to suspend its operations. The financial difficulties resulted mainly from insufficient deliveries of minerals to the buying centre which was in turn due to the problems faced by the small mines and stemmed from a lack of essential machinery and equipment, high labour costs and lack of adequate transport facilities. At the time of the revival of this company and throughout its three-year period of operations, no new capital was injected into the company. Instead the company relied on a bank overdraft secured at a very high rate of interest. If the activities of this company are to be revived, it is estimated that for the two-year period 1979/80-1980/81, a sum of Shs. 15m. - 11.25m in foreign exchange and a working capital requirement of Shs. 5m will be required. The sum of Shs. 15m. will be used for new office buildings, laboratory, godown, houses, equipment, furniture and fittings which were completely destroyed and looted during the war. On the manpower side, an experienced Chemist and a qualified Accountant will also be required.

9. As pointed out earlier, due to lack of adequate information, it is not possible to give detailed account of the operation of small mines. However, at the time of writing this report information was available on the following two mining companies - Bjordal Mines Ltd. and Kilembe Mines Ltd.

Bjordal Mines Ltd.

10. Bjordal Mines Ltd., situated at Nyamuliro - 45 km. from Kabale - produces wolfram ore. The company has been in operation for the last 21 years under different owners. Currently Continental Ore Corporation owns 40% of the share capital and the balance is owned equally by UDC and Development Finance Company of Uganda.

11. Due to the very old machinery and lack of funds to buy new machinery, the mill's production has dropped from 10 tonnes of wolfram per month in 1972 to the current 2 or 3 tonnes per month. On account of this continuous decrease in production, it is the view of the present company management that the present mill has outlived its usefulness and therefore requires to be replaced by a completely new mill. The cost of the new mill together with a new power generator is estimated to be Shs. 1.1m. In addition, a sum of Shs. 1.3m. is required to buy one bulldozer, a tractor and essential vehicles. Foreign exchange amounting to Shs. 2.4m. will be required for this purpose.

12. To carry out its operations the company requires an estimated working capital requirement of Shs. 2m., half of which will be in foreign exchange.

13. The Company currently has 210 employees and under the present strength only a Technical Manager from abroad is required.

Kilembe Mines Ltd.

14. Kilembe mines, which started operations in 1956, operates copper mines in Kilembe and a copper smelter at Jinja. The company was managed by Falconbridge Nickel Mines of Canada up to 1975 when the Government acquired all the shares of the company and placed it under the direct supervision of the President's Office. Shortly afterwards the company was placed directly under the Ministry of Industry and Power (now the Ministry of Industry).

15. At the time of writing the report neither the copper mines nor the smelter were in operation. This is due to lack of supplies of essential chemicals at the mines and lack of adequate stocks of copper concentrates, of foreign exchange to buy necessary spares and of working capital to meet payment of wages, among other things, at the smelter.

16. In general, no significant investment has taken place over the past nine years and production of both copper concentrates and blister copper has continually declined because of problems throughout the mine and smelter. Whereas the smelter is in complete disrepair with a dilapidated building, furnace and conveyor system, the mine suffers from mechanical obsolescence arising out of old machinery and equipment. The company has no working capital and is short on spares, new machinery and equipment to replace worn-out units. Because of lack of pumps, the danger exists that some sections of the mine might be flooded any time.

17. Most of the company's needs are the result of a general deterioration throughout the 1970s. The new heavy taxes imposed both on imports and exports soon after the economic war of 1972, together with the sharp drop in copper prices, drove foreign shareholders away. Meanwhile the new owner - the Government - since the takeover of the company in 1975, has lacked funds for the investment which is necessary.

18. Added to all this, the break-up of the East African Community which produced, among other things, the setting up of separate Railways Corporations in the three member states, aggravated already chaotic transport problems. Under these arrangements not only were freight costs substantially higher, but all such costs had to be paid in advance in foreign exchange which was already scarce. Transportation of goods from Mombasa by Kenya Railways stopped at the Kenya/ Uganda border, from where Uganda Railways took charge of the transportation of goods within Uganda. However, lack of wagons and serviceable locomotives made it impossible for exports and imports to be delivered in time. All this tied up capital in stocks, and caused considerable delays in the delivery of production requirements which in turn sometimes resulted in millions of shillings being spent to airfreight essential supplies to avoid plant shutdowns.

19. Shortage of working capital too in some instances forced the Company to transfer into Uganda currency and foreign exchange earned from sales of blister copper, in order to pay wages and salaries. This had the net effect of reducing foreign funds available for spares and other imported production requirements.

20. Given the present conditions, a return to 1970 levels and resumed progress of the ten year period 1970/80 to 1980/81 will require a complete rehabilitation of both the mines and the smelter. The 1970 production of blister copper was 16,958 tonnes but in 1977 this production had decreased to 2,273 tonnes. To start with, the smelter investment aimed at bringing the plant back to a reasonable standard of safety with the existing equipment will involve fixed capital costs amounting to Shs. 11.7m. all in foreign exchange, and operating costs of Shs. 22m., 12m. of which will be in foreign exchange.

21. The smelter currently employs 315 employees. To carry out the rehabilitation programme, one Mechanical Engineer for planning and design of new equipment and one Electrical Engineer for planning and design of the plant's electrical equipment will be required.

22. Investment which will take place at the mine in the course of the two years 1979/80 and 1980/81 will be for the mine rehabilitation and the cobalt plant. This will involve a total sum of Shs. 67.8m., 67.2m. of which will be in foreign exchange for the mine, and Shs. 100.8m., 81.6m. of which will be in foreign exchange for the cobalt plant. The revenue expected from this amount of investment is shown below:

Table 12.1
Expected Revenue (Shs.m.)

Year	1979	1980	1981	1982	1983	1984
Copper (Export sales)	2.2	47.6	137.5	137.5	111.5	106.0
Cobalt (Export sales)	-	-	-	528.0	528.0	528.0
Copper, Cobalt (Local sales)	0.3	1.1	3.6	3.6	3.6	3.6
Total	2.5	48.7	141.1	669.1	643.1	637.6

23. A summary of estimated capital costs and working capital requirement is given in Annex 12.2.

EXTERNAL ASSISTANCE

24. From the foregoing details it is clear that substantial external assistance in the form of skilled personnel and finance will be required by the mining sector if its investment programme is to be realised. Whereas international agencies like UNDP can be approached for technical assistance, it is recommended that, in view of the major investment programme which will be undertaken by Kilembe Mines Ltd., the Government seriously considers the possibility of negotiating a joint-venture agreement with a foreign company for the provision of know-how and necessary investment funds.

ANNEX 12.1

Mineral Production

	Unit	1970	1971	1972	1973	1974	1975	1976	1977
Gold	grams	19	na	na	64	102	152	57*	na
Cassiterite (Tin Ore)	tonnes	192	189	113	100	246	88	12	26
Wolfram (Tungsten)	tonnes	335	210	227	172	188	89	71	69
Beryl	tonnes	367	221	73	133	156	40	14	21
Blister Copper	tonnes	16958	15731	14071	9643	8912	8231	5366	2273
Apatite	tonnes	30318	15024	14582	17451	13501	4892	2116	na
Bismuth	tonnes	na	13.6	1.2	2.8	na	na	na	na
Columbite - Tantalite	tonnes	na	3	4.1	1.8	6.5	5	2.10	na
Limestone		21278	291361	232245	199771	156195	na	na	35305*

(*Provisional)

Source: Geological Survey & Mines Department.

Minerals: Summary of Estimated Capital Costs
And Working Capital Requirements (Shs.m.)

<u>PROJECT</u>	<u>1979/80</u>		<u>1980/81</u>	
	<u>Foreign Costs</u>	<u>Local Costs</u>	<u>Foreign Costs</u>	<u>Local Costs</u>
<u>Geological Survey and Mines Department</u>				
Re-equipment of six laboratories	1.4	-	-	-
Replacement of machinery, equipment and vehicles	8.0	-	2.0	-
Sub-Total (i)	<u>9.4</u>	<u>-</u>	<u>2.0</u>	<u>-</u>
<u>Small Mines</u>				
Machinery equipment, building and vehicles	na	na	na	na
Working capital	<u>3.5</u>	<u>1.0</u>	<u>2.5</u>	<u>1.0</u>
Sub-Total (ii)	<u>3.5</u>	<u>1.0</u>	<u>2.5</u>	<u>1.0</u>
<u>Itama Mines Ltd.</u>				
Building equipment and fittings	8.25	3.75	3.0	-
Working capital	<u>-</u>	<u>2.50</u>	<u>-</u>	<u>2.50</u>
Sub-Total (iii)	<u>8.25</u>	<u>6.25</u>	<u>3.0</u>	<u>2.50</u>
<u>Bjardal Mines Ltd.</u>				
New mill and new power generator	1.1	-	-	-
Bulldozer, tractor and vehicles	1.0	-	0.3	-
Working capital	<u>0.5</u>	<u>0.5</u>	<u>0.5</u>	<u>0.5</u>
Sub-Total (iv)	<u>2.6</u>	<u>0.5</u>	<u>0.8</u>	<u>0.5</u>
<u>Kilembe Mines Ltd.</u>				
(a) <u>Smelter Plant</u>				
Machinery, equipment and vehicles	6.7	-	5.0	5.0
Working capital	<u>6.0</u>	<u>5.0</u>	<u>6.0</u>	<u>5.0</u>
(b) <u>Mines</u>				
Mine Rehabilitation	47.2	0.3	20.0	0.3
Cobalt plant	36.4	10.7	45.2	8.5
Working capital	<u>30.0</u>	<u>10.0</u>	<u>30.0</u>	<u>10.0</u>
Sub-Total (v)	<u>126.3</u>	<u>26.0</u>	<u>106.2</u>	<u>23.8</u>
GRAND TOTAL :				
(i) + (ii) + (iii) + (iv) + (v)	150.05	33.75	114.5	27.8

POWER

P.K. Sardana

This paper briefly traces the development of the power sector in Uganda, analyses its present state, takes a look at the future and makes recommendations about the areas needing action.¹

2. It may come as a surprise that in a country endowed with rich hydel resources, the first electric power came through thermal sets which were installed by the East African Power and Lighting Company Limited. It was not until 1935 that serious assessment surveys were made of the hydro-electric potential of the river Nile. And it was in the light of these surveys that Uganda Electricity Board (UEB) was established in 1948 for the generation, transmission and distribution of electric power. Work was started on a 10 x 15 MW hydro power station at Owen Falls, near Jinja, and in the interim, till the construction was completed in 1954, diesel sets were installed as a source of power. As the estimated power demand of Uganda at the time was hardly 10 MW, a 50-year agreement was made with Kenya to supply that country with 30 MW per annum starting 1958.

3. Annex 13.1 shows the total power generating capacity installed in the country. It will be seen that the predominant source of electric power is the Owen Falls station.

4. Today the transmission and distribution network extends over 9,000 kms. serving nearly 93,000 consumers. There has been a ten-fold increase in power generating capacity - from a mere 15 MW in the early 1950s to nearly 155 MW now. Yet the present per capita consumption of 45 kwh is one of the lowest in the world. This is also reflected in the state of economic development.

An Analysis of Power Consumption

5. Much more disturbing has been the stagnation and, in fact, the decline in power consumption in the 1970s. Annex 13.2 gives the capacity installed, the maximum demand and the units generated. From a peak of 816 m kwh generated in 1971, the power generated in 1978 was only 639 m kwh.

6. A break-down of electricity sold according to market segments is provided in Annex 13.3. While there has been some growth in consumption by domestic and commercial sectors, that of industry has dropped by 50% over the decade 1968-78.² It will also be observed that with the decline in power consumption by industry - the major user in Uganda - the share of Kenya in total units sold has increased from about 34% to nearly 40%.

7. A further analysis of power consumption by major market segments and of the revenue obtained from them reveals certain interesting facts. This analysis is presented at Annex 13.4. It will be seen that in 1970, electric power sold in Uganda (amounting to about 63% of total generated) accounted for 90% of the revenues whereas the remaining 37% supplied to Kenya accounted for hardly 10% of the total income. In 1977, Kenya's share in UEB's revenues was still below 10% despite its consumption of nearly 45% of total power generated.

-
1. During the period when most economic activity was showing signs of deterioration, the power sector stood out as an island of strength. True, the generation and consumption of electricity has gone down in the 1970s but this is due more to a decrease in load than to any inadequacy of response to demand.
 2. To some extent, the industrial sales were affected in 1969-70 by the switch from electricity to fuel oil for raising steam, for example, in textile mills. While the use of fuel oil for generating process steam may be considered technically superior, the recurring and continually soaring costs should limit its use especially when the other alternative is a cheap and abundant source of power. It is believed that fuel costs are about-to-be commissioned Lake Katwe Salt Project alone would be over Shs. 10 m per annum. The opportunity cost of not using hydel power seems to be too high. Substantial foreign exchange can be saved by switching over to electricity from use of the fuel oil in industry.

8. This, then, is the present state of the power sector in Uganda:
- A single source of electricity for all practical purposes - the 150 MW capacity Owen Falls hydro station.
 - A per capita consumption of 45 kwh - one of the lowest in the world.
 - A 50 year agreement (till 2008) to supply 30 MW p a to Kenya.
 - A consumption ratio of about 60:40 between Uganda and Kenya with the corresponding revenue ratio being 90:10.
 - Within the Ugandan market, a steep fall in consumption by industry - from 72% in 1969 to 48% in 1978.
9. The picture since 1978 is not reassuring either. On 4th June 1979, for example, only five machines (our of 10 installed) were found to be working at the station, each giving an output of 9-10 MW. The load fluctuation in previous weeks has been between 25 and 70 KW.

Recent Damages

10. Fortunately, there has been no material damage to the power project and its associated sub-station at Jinja during the recent fighting. The only damage has been the destruction of a door outside generator No. 10, marks on the outer covering of the machine and the shattering of about a dozen glass panes.. UEB has made an estimate of the requirements in view of damages to the distribution system and other equipment. This estimate amounting to a total of Shs.20 m. is shown in Annex 13.5.

Planning for the Future

11. In planning for future power development in Uganda, one is immediately struck by the present underutilisation of capacity in view of the insufficient load. No wonder then that when we broached the idea of doubling the power capacity in five years the response was one of surprise. The UEB expects that industrial recovery will at best raise the demand by 10-12 MW. From Annex 13.3 it will be seen that there has been a decline of about 25 MW in power consumption by industry. Thus, a complete recovery to the 1969 production level should entail a rise in power generation by at least 25 MW, if not more.

12. If the expected increase in industrial production is to be sustained beyond the immediate recovery period and if Uganda is to embark upon an industrialisation programme in the process of economic development, there can be no escape from planning now for what the power scene should be, say five years hence. During the early stages of development, quantum jumps take place, especially in infrastructural sectors and basic industries. In fact their growth rates lead those of other sectors. Empirical evidence suggests that an increase in electricity generation has to average 13-15% per annum if the industry growth rate is to be 7-8%. For any effective economic development to take place in Uganda, 13 to 15% growth in power capacity (that is, doubling within five to six years) is desirable, necessary and not highly ambitious.

13. The simultaneous maximum demand in 1978 was 119 MW. Even assuming a further decline, (taking 110 MW as the maximum 1979 load, and assuming only 10% growth p a inclusive of needs for industrial recovery, the projections of generating capacity and the estimated demand are as follows:

<u>Year</u>	<u>Generating Capacity</u>	<u>Estimated demand equivalent</u>
	(MW)	
1979	150	110
1980	150	121
1981	150	133
1982	150	146
1983	150	161

The generating capacity of 150 MW presumes that there is no standby unit as at present - otherwise it will stand reduced to 135 MW. Thus it appears that demand will outstrip supply in or around 1983. Now is it being geared up to meet the situation?

14. An estimate made in 1948 puts the total hydro-electric potential of the country at 2,500 MW. Annex 13.6 lists the projects which were considered in the past but abandoned for one reason or another. Annex 13.7 identifies the possible sites for future hydro-electric stations. In a country like Uganda, well-blessed with lakes and rivers, there would be many sites for local tapping by setting up mini and micro hydel power stations. In UEB's view the capital cost of the latter would be very high. There is a need to work out the economies of cost in each case separately, taking into account the savings in transmission and distribution costs to remote sites.

15. In the present reckoning of UEB, Ayago Power Station is the best bet. While the selection of appropriate sites is the subject matter of concerned experts, the need for setting up additional power generating capacity cannot be over-emphasised. Keeping in view the industrial development requirements of the Western and Northern regions as well as the transmission and distribution aspects, it may be better to have a second major source away from the present location. However, it is a matter of expert opinion. The first stage of 60 MW at Ayago is likely to cost around £16-18 m. Considering the long time taken in constructing a hydel station (five to seven years), there is urgency in initiating the work now.

The time/cost phasing of the project as estimated by UEB is as follows:

<u>Year</u>	<u>Estimated Expenses</u>	<u>Remarks</u>
1979	3	Payments to consultants for preparing project report. Part payments already made
1980	30	Finalisation of negotiations. Start of civil construction work
1981	60	
1982	60	
1983	75	Installation of equipment
1984	30	Commissioning

UEB expects that phase I of the Ayago project would start generating power only by 1984/85. From para 13 we notice that demand will exceed supply by 1983. Thus there is likely to be a shortage of power in 1983/84. It only points to the urgency of planning for additions to generating capacity. While a period of five to six years is normal for a hydro-power station, it is suggested that steps like close management monitoring be undertaken to reduce the total time cycle. A token sum of Shs. 2-3 m. could be provided for undertaking surveys and site preparatory work.

16. Besides additions to generating capacity there are the associated needs of transmission and distribution. The highest transmission voltage at present is 132 KV. The considerations of bulk transmission over long distances, possible further exports to neighbouring countries and the needs of industry five years hence raise the issue of whether the country's highest transmission voltage should be the next stage of 220 KV. Preliminary studies in this regard would be desirable. It would also be necessary for the UEB, in view of the relative insulation of the power sector from technological trends in the field abroad, to upgrade its technical expertise, especially in the areas of instrumentation and control systems and high voltage transmission. The UEB has in mind a number of transmission and distribution schemes (see Annex 13.8). These, estimated to cost Shs. 100m., would necessitate outside funding. In the past, the only external financial assistance obtained was a loan of £3 m. from the World Bank for installations at Owen Falls during the period 1961-63.

Power Tariff and Supplies to Kenya

17. According to UEB, the power tariff has remained unchanged since 1961. I was told that present rates in Uganda were almost a quarter of those in Tanzania and about half of those prevailing in Kenya. It is true that, unlike thermal power stations, there is not much recurring maintenance expenditure on hydro stations. It is also true that per capita consumption needs to increase substantially if any significant economic development is to take place. But a rise in tariff, it is felt, will affect the power consumption temporarily only and the long-term trend of increasing consumption will not be affected. More to strengthen the internal resources position for future expansion than to meet any increase in operational costs, the Government may seriously consider raising the electricity tariff. Alternatively, a cess could be imposed on the present rates which should go to a fund earmarked specifically for the rural electrification programme which presently seems to be hampered by financial difficulties.

18. This will also provide a vital opportunity of raising the question of a tariff increase with the Kenyan authorities. Even though, it is believed, the contract provides for changes in tariff based on mutual consent, and this issue has been taken up by the Ugandan authorities in the past, there has been no outcome so far. Against approximately 4 cents per unit being charged by Uganda, Kenya, it seems, had indicated 60 cents per unit if it were to make power supplies to Uganda. Even though accepting the fact that long-term bulk power supplies are usually at a low price, the price of power supplies to Kenya seems to be too low. It is suggested that negotiations be held with Kenya on enhancing the power tariff.

19. The UEB has been running two manufacturing works also - one for producing lamps and the other for producing cables. The technology involved in making lamps is quite different from that of generating electricity. The advantage, if any, of UEB running these factories is not clear. On the other hand, lamp manufacture seems to have been neglected (see the paper on Industry). In fact, UEB itself is not keen to retain the manufacturing activity. Under the circumstances, it will be appropriate to detach these operations from the UEB.

Conclusion and Recommendations

20. - The present level of power generation in Uganda is in the region of 90 to 100 MW, with about 40% of it being supplied to Kenya under an agreement due to expire in the year 2008. The revenues from this market account for only 10% of the total income from sales of power.
- The share of industry in the total consumption of power in Uganda has dropped from over 70% in 1968 to below 50% a decade later.
- The full recovery of the industrial production level to that of 1969 within the next two years would entail an increase of 160 kwh in power generation (equivalent to about 25 MW). The present installed capacity will suffice for meeting this requirement.
- The extent of damage to the equipment and systems has been assessed by UEB at about Shs. 20 m. in foreign exchange. Out of this, hardware equipment needs account for Shs. 7 m. and the remaining Shs. 13 m. is for transport vehicles and construction of buildings, etc. It is understood that the EEC mission has made an aid commitment of Shs. 20 m. for the power sector. Together with UEB's own resources and capabilities, this should meet the immediate requirements for finance. There does not seem to be a case for any further outside financial assistance so far as recent damages are concerned.
- The sustenance of industrial growth and the needs of a developing economy make it imperative that there be adequate growth in the power sector - say a growth rate of 13 to 15% p a.
- Power programmes, especially the hydel-based, take a long time to be implemented - conception to commissioning period may run to five to seven years or even more. The time to plan for the power scene in 1985, therefore, is right now. One cannot but take a long term perspective when it comes to power.

- According to present reckoning, demand will outstrip supply in or around 1983/84 depending upon the rate of economic growth. Unless immediate and urgent steps are taken, it may be too late for Uganda to avoid shortages in power generation within the next four to five years.
- Uganda will need to have additional generating capacity preferably elsewhere than in the Eastern Region. UEB adjudges the Ayago project (with a total capacity of 500 MW) as the best scheme with a first phase of 60 MW (1979-80) costing around Shs. 270 m. The Ayago site was not visited but the estimate seems to be reasonable. Together with the needs of the transmission and distribution system, the power development programme of Uganda in the next four to five years is estimated to cost over Shs. 400 m.
- The capital - intensive power scheme will obviously need outside assistance, notably from the World Bank. It is recommended that a provision of Shs. 2-3 m. be made for site surveys and other preparatory work during the year 1979-80.¹
- The Government may like to revise upwards the power tariff, unchanged since 1961, with a view to providing internal resources for development financing or building up a fund for the subsidised rural electrification programme.
- The factories for producing electric lamps and cables should be delinked from UEB as the business of making and selling these products requires exclusive attention.

1 The bulk of external funding when negotiated and finalised, would, of course, be specific to projects/schemes spread over a number of years

ANNEX 13.1Power Generating Capacity Installed in Uganda

	MW
Owen Falls Hydro-electric Station	150
Mabale Hydro-electric Station	1
Diesel stations at Arua, Koboko, Adjumani and Moyo	<u>3</u>
Total	<u>154</u>

ANNEX 13.2Supply and Demand of Electricity over 1966-78

	<u>Unit</u>	<u>1966</u>	<u>1968</u>	<u>1969</u>	<u>1971</u>	<u>1973</u>	<u>1975</u>	<u>1977</u>	<u>1978</u>
Installed Capacity	MW	138	153	154	154	154	154	154	154
Simultaneous maximum demand	MW	114	132	128	130	130	122	114	119
Simultaneous maximum demand as % of installed capacity	%	83	86	80	84	84	80	74	74
Total Units generated	mkwh	635	731	731	816	793	727	688	639

Power Consumed by Different Market Segements

	<u>Unit</u>	<u>1966</u>	<u>1967</u>	<u>1969</u>	<u>1971</u>	<u>1973</u>	<u>1975</u>	<u>1977</u>	<u>1978</u>
Total Units generated	mkwh	635	731	731	816	793	727	688	630
Transmission losses	mkwh %	56	73	67	73	52	84	84	80
Units Available	mkwh	579	658	664	744	701	643	604	550
Total supplied to Kenya	mkwh %	203 35.1	224 34.1	218 32.9	293 39.4	302 43.1	261 40.6	272 45.1	217 39.5
Total consumed by Uganda	mkwh %	376 64.9	434 65.9	446 67.1	451 60.6	399 56.9	382 59.4	332 54.9	333 60.5
Consumed by domestic sector	mkwh %	50 13.3	59 13.6	64 14.3	83 18.4	70 17.5	82 21.5	88 26.5	98 29.4
Consumed by commercial sector	mkwh %	46 12.2	55 12.7	59 13.2	81 18	76 19	77 20.1	69 20.8	74 22.2
Consumed by industrial sector	mkwh %	280 74.5	320 73.7	323 72.5	287 63.6	253 63.5	223 58.4	175 52.7	161 48.4

Analysis of Power Consumption and Contribution to Revenue (%)

Market Segment	1970		1972		1974		1976		1977		Average Cost per unit in cents
	Cons.	Cont.	Cons.	Cont.	Cons.	Cont.	Cons.	Cont.	Cons.	Cont.	
Domestic	10.4	20.7	10.5	20.5	11.1	21.3	14.3	25.8	14.5	26.8	31
Hotels, clubs etc.	2.7	5.2	3.6	6.1	3.1	5.7	3.3	5.9	3.2	5.9	31
Commercial power and heating	3.6	10.4	3.4	12.5	3.4	9.1	3.4	9.2	3.1	8.4	44
Commercial and security lighting	3.2	13.5	3.5	13.2	3.9	14.4	4.1	15.3	4.1	15.3	62
Street lighting	0.8	1.7	0.8	1.7	0.9	1.8	1.1	2.1	1.1	2.0	31
Industrial power - standard	17.0	24.5	17.6	23.3	17.5	25.3	14.7	21.6	14.1	21.4	24
Industrial power - special	24.8	14.2	21.4	12.5	17.5	10.9	17.7	12.1	14.9	10.8	11
Sub-total Uganda	62.6	90.7	61.0	90.7	57.4	89.7	58.8	92.1	55.0	90.7	26
Kenya	37.4	9.3	39.0	9.3	42.6	10.3	41.2	7.9	45.0	9.3	3.8

Cons. - Consumption % of total units sold

Cont. - Contribution to total revenue

UEB's Estimated Requirements to Replace Materials and Equipment
Looted or Destroyed During Recent Military Operations in Uganda

	Shs. m.
DISTRIBUTION SYSTEM	
33 KV line Kampala - Masaka	0.45
House service lines	0.15
100 transformers	1.80
200 meters and cut-outs	0.06
Linesmen's tools and equipment	0.12
<u>Sub-Stations:-</u>	
<u>Masaka</u> - 5 OCBs and protective gear	0.12
<u>Mbarara</u> - One 2.5 MVA transformer	2.22
One 1.0 MVA transformer	0.11
5 11 KV OCBs	0.07
3 air-break switches	0.01
COMMUNICATION SYSTEM	
Radios in Board's vehicles	0.04
Fixed radio stations	0.12
DOMESTIC REPAIR WORKSHOPS	
Tools and spare parts	0.07
TRANSPORT	
68 vehicles	7.15
Tools and equipment - main repair centre	0.03
OFFICES AND HOUSES	
Furniture and equipment	0.03
Repairs	4.50
New offices at Mbarara and Mityana	0.75
New house at Mbarara and Masaka	0.45
GENERATION	
No damage, but diesel stations in Arua, Koboko, Adjumani, and Moyo are feared destroyed and if so, cost of new generators as well as provision for mains and services is estimated at	<u>3.30</u>
Total	<u>19.82</u>
or, say	Shs. 20 m.

ANNEX 13.6

Projects Considered in the Past and Subsequently Abandoned

Year	Brief Description of Project	Estimated Cost (Shs. m)		Mode of Finance	Reason for Abandoning
		Foreign Exchange	Total Cost		
1966	180 MW Hydro-Electric station at Bujagali about 4½ miles below Owen Falls with transmission to Kampala initially	14	23	World Bank loan contemplated with contribution from UEB revenue surplus	World Bank wanted to consider East Africa as a unit and so Murchison Falls next considered
1968	600 MW Hydro-Electric station at Murchison Falls (now Kabalega) with transmission to Kenya and Kampala	40	65	World Bank loan contemplated with contribution from UEB revenue surplus	Kenya backed out after having agreed to participate
1970	A revised scheme at Murchison to provide for Uganda only. This provided for an initial installation of 150 MW based on run-of-river leaving a dam to be constructed in later development together with transmission to Kampala. Meantime the output would be 80 MW.	12	19	World Bank loan contemplated with contribution from UEB revenue surplus	Uganda Government declined to approve the contract negotiated by UEB thinking they could get better terms which they did not
1971	Extension of Owen Falls to provide an additional 60 MW	4	6	UEB Revenue over 4 years	Contract due to be signed on same day as Asians expelled from Uganda but frustrated as Norwegian Govt. disapproved of Uganda's action

ANNEX 13.7

Potential Sites

	<u>Estimated Capacity MW</u>
Bujagali - 4½ miles below Owen Falls	180
Busowoko (below Bujagali)	160
Kalagala (below Busowoko)	115
Kabalega (formerly Murchison) Falls	600
At the confluence of the Rivers Ayago and Nile about 15 miles east of Kabalega	500
Kamdini - about 25 miles east of Ayago	200
	<u>1,755 MW</u>

Schemes Identified by UEB

- (i) A major extension of the transmission system:-

The construction of a high voltage line (initially at 132 kV) from Ayago to Kampala is an obvious procedure and we would tap this line at Kigumba and connect to Masindi at 33 kV thus avoiding the necessity of building a new line all the way from Kampala to Masindi with which we would soon be faced;

Completion of a 132 kV ring - Owen Falls, Lira, Ayago, Kampala, Owen Falls - we would build a line from Ayago to Lira. Thus the many places at present on supply from Owen Falls would be given an alternative source from Ayago;

A 132 kV line Ayago/Arua will go direct and at Arua be stepped down to supply places en route to Moyo at 33 kV;

A 33 kV line will go from Ayago through Pakwach and on to Nebbi thenceforth to Arua, thus enabling service to all parts north and south of Arua;

A 33 kV line out of Ayago will divide, one part going to Gulu and the other to Chobe;

A 33 kV line Lira to Kitgum;

A 33 kV line Soroti to Moroto;

A 33 kV line from Hoima to Mubende and then west to Fort Portal;

The 33 kV line already in use at Katunguru south of Kasese will be extended to Rukungiri but before getting there the line will branch off at Bushenyi and go to Mbarara. Again there will be the alternative of supply from Owen Falls or Ayago;

The ultimate aim is to enable all areas of supply to have access to power provided by both Owen Falls and Ayago

- (ii) An important sub-station at Mutundwe, Kampala. This will contain a 15 MW transformer with attendant plant and lines to Kampala North Station thus providing greater security of supply. Cost is estimated at Shs. 5 m, of which about half has already been spent.
- (iii) A new sub-station at Entebbe to reinforce supply there. Cost is estimated at Shs. 1 m.
- (iv) Lines to hospitals at Kitagata, Yumbe, Anaka, Ithozho, Kagadi and Nebbi at a total estimated cost of Shs. 20 m.
- (v) A suggestion has been made that additional power should be made available at Kabale for possible major mining development in that area. The line could start from the 132 kV terminal at Masaka and involve construction of about 170 miles of 132 kV line to Kabale at an estimated cost of Shs. 65 m.
- (vi) Supply to water pumping stations at Mityana Kitgum Moigi Kaberamaido Rukungiri Adjumani and Koboko at an estimated cost of Shs. 2 m.
- (vii) Diesel stations on four islands and another at Kisoro in the extreme south-west beyond Kabale at estimated cost of Shs. 12 m.
- (viii) Television stations at Kaguli, Biko, Kigulya and Ibanda at an estimated cost of Shs. 2 m.

TOURISM

S. Montsi

Background

Uganda is a beautiful country with excellent tourist potential. Despite its tropical location its climate is temperate because of its altitude; some 3,000 ft. above sea level. The temperature seldom rises about 85°F (29°C) or falls below 60°F (15°C). With its average annual rainfall of 50 inches spread reasonably well throughout the year, vegetation is green and lush for most of the year. The country has lakes, mountains and forests. It also abounds in beautiful wild-life.

2. Hotels and lodges have been developed throughout the country both by government parastatals and private entrepreneurs. Attached or adjacent to many of the hotels and lodges are good facilities for wild-life and bird watching, golf, fishing, cruising and mountain climbing. There are recreational facilities in or close to most hotels in the cities. The Uganda Tourist Development Corporation advises that by 1974 there were about 36 hotels and lodges with some 2,500 beds. There were three national parks, the Kabalega National Park in the north west, the Rwenzori in the west, and the Kidepo Valley in the extreme north. There were also 11 game reserves, game sanctuaries and controlled hunting areas.

3. Up till 1974 the Uganda Development Corporation (UDC) was the Government arm in the development of tourism. The UDC developed and ran hotels through its Uganda Hotels Ltd. Uganda Wild Life Development Ltd. operated tours, sightseeing and hunting trips. UDC also ran some lodges through the Safari Lodges Prop. Ltd. In 1974, after some re-organisation of the sector, the Uganda Tourist Development Corporation (UTDC) was created by presidential decree. This Corporation was given the mandate for the smooth operation and development of the tourist industry in Uganda. It was given all UDC companies in this sector.

4. Tourism as an industry had developed rapidly in the late 1960s providing growing employment opportunities and foreign exchange. The peak was reached in 1972 when about 85,000 visitors were recorded (See Table 14.1 below). In 1973, however, tourism was

Table 14.1
Arrivals, Night in Uganda and Foreign Exchange Spent

Year	Arrivals ¹ (000)	Night Spent ² (000)	Foreign Exchange Spent (Shs.m.)
1969	65	630.5	-
1970	70	679	-
1971	78	756.6	-
1972	85	824.5	156.4
1973	-	-	-
1974	2	19.4	4
1975	3	29.1	5.5
1976	3.5	34	6.3
1977	5	48.5	9.5
1978	6.3	61.2	11.6

- Note:
1. Figures ex Uganda Tourist Development Corporation
 2. It is estimated that 9.7 nights is spent in Uganda - Economist Intelligence Unit (EIU) - Quarterly Economic Review of Uganda, Ethiopia and Somalia - Annual Supplement 1978.
 3. Each tourist spends \$23 a day - see EIU report in (2) above
 4. Exchange Rate of Shs. 7.9 = \$ 1.00

banned while the Government reformulated its policy in the sector. But once the UTDC was set up, it quickly went to work and tourists started trickling into Uganda. By 1978 about 6,300 tourists had been recorded, and it is possible that more people visited the country than were recorded, for two reasons: the general chaotic situation amongst officialdom may have hampered recording, and some tourists may have come in their own vehicles rather than through UTDC organised transport.

5. It is estimated that the 85,000 people who visited Uganda in 1972 spent a total of Shs. 156.42 m. in foreign exchange. Tourism, therefore, came third amongst leading foreign exchange earners in 1972.

Table 14.2
Major Foreign Exchange Earners in 1972
(Shs. m.)

1. Coffee	1,128
2. Raw Cotton	368
3. Tourism	156
4. Tea	125
5. Copper	112

With Uganda's facilities and attractions (rehabilitated), stable political climate, and aggressive and well organised promotion and tourist handling programmes, this sector can easily overtake other sectors and rival coffee as a major foreign exchange earner.

Problems facing the sector

6. When UTDC was established it was not capitalised at all. It depended on monthly handouts from the Treasury. This arrangement ceased in 1975, and, ever since UTDC has been parasitic on the hotel industry. The de facto transfer of the three units from UDC has never been legalised. As and when the transfer is effected UTDC will have to face the heavy indebtedness of its acquired subsidiaries. By the end of 1978 this debt was estimated at Shs. 46.2 m. For details see Table 14.3.

Table 14.3
UTDC Indebtedness
(Shs. m.)

Name of Co.	Equity	Loans	Overdrafts	Total	
				Loans + O/Drafts	Overall
Uganda Hotels	10,436,800	42,512,010	-	42,512,010	52,948,810
Uganda Wildlife Dev.	1,000,000	1,757,910	400,000	2,157,910	3,157,910
Safari Lodges	20	1,537,360	-	1,537,360	1,537,380
Total	11,436,820	45,807,280	400,000	46,207,280	57,644,100

UDC will also want to be compensated for its equity investments in these companies. UTDC could, of course, argue that any compensation in this regard should bear some relationship to the real value of the investment upon transfer, and, it is possible that this may have been lower than the original value of UDC equity investment.

7. The 1973 government ban on tourism shook the industry badly. The subsequent reign of terror discouraged all but the most determined tourists. The war of liberation has not helped either. To revive tourism a powerful international promotion programme is necessary.

8. The war damaged a few facilities and looters removed from some hotels all the fixtures and fittings, furniture, cutlery, stocks of consumables, bedding and linen. This has put out of commission 14 hotels and lodges with 478 beds (excludes Pakuba Lodge) - see Annex 14.1. This is about 20% of all hotel beds available in Uganda. As the soldiers fled they indiscriminately slaughtered wild life in the game reserves and national parks. The worst affected is the Kabalega National Park where almost all the animals are reported to have been destroyed.

9. Over the past eight years foreign exchange and financial problems of the hotels and lodges made it impossible to purchase spare parts for maintenance and replacement. Hence most equipment badly needs overhauling and replacement. At the Kampala International, a newly acquired subsidiary, all the kitchen, laundry and telephone equipment need to be replaced.

Issues

10. It is important that the UTDC equity base be determined and subscribed for by Government. Management has proposed some Shs. 50 m. Should UTDC get this amount it should take responsibility for clearing its subsidiaries, loans and overdrafts, currently a burden to UDC. What could happen, is for the three companies' equity to be raised and subscribed for by UTDC, so that they could service their loans and overdrafts.

11. All legal matters on the transfers should be effected with minimum delay.

12. UTDC and its subsidiaries in the next financial year should concentrate their efforts on:

- (a) Determining the most profitable hotels, lodges and tourist circuits. These should be rehabilitated as quickly as possible. Saleable packages based on these facilities should be arranged, and aggressive promotion of these packages started abroad. I was advised by UTDC management that the following circuits were viable and popular before the war:

Kampala - Paraa - Pakuba

Kampala - Chobe

Kampala - Mweya

Kampala - Kasese - Semlika

- (b) Other units should perhaps remain closed, or even be closed - to save costs. They should, however, be well guarded. If the Government insists on certain unprofitable units being opened, the financial implications should be worked out and Government requested to meet any necessary subsidies. The position should, of course, be reviewed from time to time as the country returns to normality and tourism picks up momentum.

13. Urgent study of the nature and magnitude of the damage to the National Parks and game reserves should be started. International help for this restocking should be sought.

Resources

14. Apart from the Shs. 50 m. for recapitalisation, the industry badly needs some Shs. 33.2 m., of which Shs. 23 m. is foreign exchange for rehabilitation. This is shown in Table 14.4.

Table 14.4
Financial resources required 1979/80

	Total	Foreign Exchange
	Shs. m.	Shs. m.
UTDC Capitalisation		
Hotels and Lodges (including Kampala International)	20.0	15.0
Wild-life rehabilitation	1.5	0.5
Revival of Tours and Vehicles	4.7	2.0
Promotion - Office Rehabilitation	7.0	5.5
Total	33.2	23.0

Source UTDC

15. Manpower requirements as identified by UTDC are shown in Table 14.5.

Table 14.5
Personnel Requirements

	1979/80	1980/81
<u>UTDC</u>		
- Tourism Manager - Strong in Systems and Marketing	1	1
- Financial Controller	1	1
<u>Hotels</u>		
Marketing Manager	1	1
Financial Controller - hotels	1	1
Hotel Engineer	1	1
Aircraft Catering	1	1
Lodges Manager	1	1
<u>Tours</u>		
Systems and Sales Managers	1	1
<u>Wild Life</u>		
Wild life experts	2	2
	10	10

16. Areas of Foreign Assistance:-

- If the UTDC capitalisation problem is cleared, the transfers of companies legalised, and personnel requested in Table 14.5 is forthcoming, then, the Shs. 33.2 m. asked for could come in the form of a soft loan. This should be channelled through an institution that will oversee developments in UTDC and offer advice and assistance. The local development banks could assist in this regard.
- Bi-lateral aid agencies could be requested to provide the personnel requested in Table 14.5. In 1971 there was a Nuffield Unit of Tropical Animal Ecology programme centred at Kabelega National Park. The Unit was studying wild life habitat, health, and related problems. Perhaps this agency could be approached to assist with experts and finance for re-stocking the parks. Friendly countries with wild life could be approached for assistance with re-stocking. The World Wild Life Association could also be approached for help.

Damage to Hotels

1.	Completely destroyed	
	At Masaka - Tropic Inn	40 beds
	At Mbarara - Treeshade Inn	30 beds
2.	75% Destroyed	
	Pakuba Lodge	
	At Fort Portal - Semliki Lodge	80 beds
3.	Total looting	
	At Gulu - Acholi Inn	30 beds
	At Mbarara - Agip Hotel	18 beds
	At Lira - Lira Hotel	60 beds
	At Masindi - Masindi Hotel	32 beds
	At Gulu - Chobe Lodge	60 beds
	At Kampala - Silver Springs Hotel	100 beds
	At Entebbe- Lake Victoria Hotel	180 beds
	At Tororo - Rock Hotel	32 beds
	At Kampala - Hotel Equatoria	180 beds
	At Kampala - Rairway Hotel	86 beds
		928 beds

Source: UTDC

TRANSPORTATION & COMMUNICATIONS

AN OVERVIEW OF TRANSPORTATION

David M. Nowlan and Donald F. Peckham

This and the next four papers describe the transportation situation in Uganda in June, 1979, immediately after the liberation war that ended eight years of military rule. Events that dominated the transport sector during those eight years are sketched, and damage caused by the 1979 fighting, including looting and destruction of property by retreating troops of the military regime and by civilians, is noted. The reconstruction of the transportation sector that might be undertaken over the next several years is discussed, with special attention being given to those projects that would contribute most significantly to this reconstruction. An attempt is made to relate these projects and reconstruction in general to the longer run development of the Uganda transportation sector.

2. In addition to the reports¹ made available to us by government and parastatal officials who were assigned to work with us, we have based our analysis on discussions with many other individuals in the transportation sector. In Kampala, and in up-country trips to the south-west and the east, we have observed road and traffic conditions as widely afield as time and security conditions permitted.

3. Our general conclusion, which is elaborated in succeeding parts of this report, is that the transportation sector of the Uganda economy has been so undermined by eight years of neglect capped by war damage in April and May, that it is incapable, without massive infusions of maintenance equipment, spare parts, workshop facilities, vehicles and railway rolling stock, of underpinning the national economic reconstruction that is to be undertaken. The vehicle fleet of buses and lorries has badly deteriorated as a result of lack of spare parts and poor road maintenance. The private sector has been better able to keep its fleet moving because of the availability of magendo or black-market parts, access to which is officially denied the publicly owned corporations; but even the private fleet has aged rapidly over the period and was seriously depleted by war damage.

4. The breakup of most components of the East African Community during the mid-1970s affected railway activities in Uganda especially severely. Uganda Railways Corporation (URC), which was created in July 1977, has suffered a rapid erosion of traffic, and most particularly has not been able to accommodate the major share of import, export and transit traffic which rail customarily carried in Uganda, even though the total amount of this traffic itself diminished over the period. As a result of the lowered capacity of the railway, an increased transportation burden was placed on the lorry fleet. Because of the deterioration of this fleet, Kenyan lorries, hired at heavy foreign-exchange costs, had to be used to carry goods traditionally moved by rail, a situation that continues.

5. Passenger transportation services have been equally affected by the years of neglect. At the moment, on all up-country roads over which we travelled, people are being carried in the backs of unlicensed, open, 10-ton lorries, at rates up to 20 and 30 times the officially posted fees schedule for licensed passenger-carrying vehicles. People wait days for transportation, even to and from major centres. To some extent, the crisis in passenger transportation is the result of war damage, but it has arisen more fundamentally from the growing inability, over the years, of the licensed bus fleet to handle even a stable level of demand. Several up-country bus depots we visited still had available their schedule of routes served in the late 1960s and early 1970s. Where 20 or 30 buses had been available then at each depot to serve 20 or more licensed routes, there would have been in late 1978 only one bus serving only one of these routes; and typically that bus would have been stolen or damaged during the 1979 war. To make the situation even worse, few bicycles or motorcycles were imported during the military regime, so that one sees on the Uganda roads only a fraction of the customary number of these machines.

6. The reconstruction period projects given highest priority in our report help define a development strategy with several distinct features. Rail, according to this strategy, should recapture the long-distance traffic lost during the 1970s to road

¹These reports are filed with the other reports received by the Commonwealth Team.

transport - an especially important objective to achieve in the face of rising oil prices; the development of an enlarged capacity to service vehicles and to maintain and repair roads is emphasised; special attention is paid to the reduction of transportation constraints in the export sector; and the relative importance of buses and bicycles for transporting people is to be returned to earlier levels.

7. Although our focus is on the physical reconstruction of the transportation sector, we regard the financial reconstruction, especially of publicly owned corporations, as critical and complementary to the physical rehabilitation of the sector. These corporations - the bus companies, transport companies and URC - have not been able to generate sufficient revenue to meet normal operating expenses. As a result, current revenue (supplemented often by loans or asset sales) has been used to service only the wages bill and to pay for essential items such as fuel. Maintenance and repair has suffered, equipment expansion has not taken place, and often very large short-term liabilities have been allowed to accumulate. These conditions are common to public corporations beyond the transportation sector, and call for the high priority development of a credit programme during the reconstruction period, a need which is elaborated in the sector report on banking and currency.

8. In the papers that follow, we discuss transportation problems in greater detail, beginning with URC, followed by the road network, road transport and civil aviation. Each of these papers ends with a summary table or statement of high priority reconstruction.

UGANDA RAILWAYS

David M. Nowlan and Donald F. Peckham

RAIL SERVICES

Background

Until 1974, rail services in Kenya and Uganda were organised as a single operating entity within the East African Railways Corporation, although each country-system separately collected revenue for goods loaded in that country. Train and traffic control in both countries was centred at the Nairobi headquarters, where locomotives and rolling stock for the two-country system were kept and maintained. Financial pressures on the Corporation in 1974 led to the imposition by Nairobi headquarters of separate servicing and maintenance charges on the Uganda district. The reluctance of Uganda to accept these charges led to a deterioration of services provided to the Uganda section of the Corporation, and was the beginning of friction between the Ugandan and Kenyan rail services that has continued through to the present.

2. Political tension between Uganda and Kenya in 1976 resulted in the temporary suspension of Kenyan rail services to Uganda and the subsequent decision by East African Railways Corporation (EARC) to charge separately for goods and passenger movements in each of the two countries and specifically to require that all Ugandan-loaded goods to, or in transit through, Kenya be prepaid in convertible currency. Passengers travelling between the countries have been, from 1976, required to detrain at the border and pay tickets in the currency of the country they are entering.

3. This de facto separation of the rail systems of the two countries was formalised in 1977 when the East African Community disintegrated and URC was formed. With this separation has come a continuing set of problems for Ugandan Railways: it must rely on heavy-duty Kenyan engines for the main-line haul from Kenya to Kampala; all major servicing must be done in Nairobi, at prices and standards with which Uganda is unhappy; and the number in Uganda of former EARC wagons, which run between the two countries, is generally both less than the number required by Uganda and considerably less than the number Uganda believes it should have as a result of the division agreed upon in 1977. These problems, combined with the rapid deterioration of the Ugandan economy under the military regime, resulted in traffic levels before the liberation war that were only a fraction of earlier levels, as Table 16.1 and Table 16.2 show.

Table 16.1

Uganda Railways Traffic Volumes 1973-8 (All Stations)

Year	Passengers	Goods Forwarded (000's of tonnes)	Goods Received (000's of tonnes)
1971	552	1,030	786 ¹
1972	667	669	584
1973	1,185	772	1,036
1974	1,659	670	918
1975	2,007	493	949
1976	1,697	377	767
1977	867	308	363
1978	866	130	287

¹ This number is incorrectly reported in the source as 1786 thousands

Source: Uganda Railways Corporation,
Rehabilitation, Improvement and Development 1979/81.

4. During the 1970s, transit traffic to and from Zaire and Rwanda, which had been running at over 200,000 tons a year each way through a transit depot at Kasese, was lost to the railways - as a result, we are told, of government mismanagement of the depot which it took over in 1975. In the early 1970s, virtually all the Ugandan Coffee Marketing Board coffee was shipped by railway to Mombasa. By 1978, not much over half the officially recorded Ugandan coffee output was being exported by rail, largely because of restrictions placed on this traffic by Kenya authorities. Lorries, mainly from Kenya, were hired to substitute for this lost railway capacity.¹ Passenger traffic on the railway, which had grown in the mid-1970s, mainly because of the increasing inability of the Ugandan bus fleet to handle passenger demand, fell dramatically after 1976 because the railway had neither enough coaches nor sufficient locomotion after the break-up of the EARC to carry its previous volume.

Table 16.2

Tonnage of Main Commodities Loaded, 1973/78
(000's of tonnes)

Commodity	1973	1974	1975	1976	1977	1978
Cotton lint	71	38	26	14	8	10
Cotton seed and cake	70	48	37	11	5	3
Coffee (CMB)	218	194	155	131	82	52
Coffee (other)	32	23	19	19	1	1
Copper concentrate	47	33	26	16	13	5
Blister copper	10	8	7	7	2	2
Tea	16	15	9	8	2	-

Source: Uganda Railways Corporation,
Rehabilitation Improvement and Development 1979/81

Current Situation

5. Because of its diminished capacity to offer rail services with the remnants in Uganda of the EARC fleet, and because of its concern over the cost and quality of servicing in Nairobi, Uganda Railways has over the last two years moved to expand its own fleet and to develop its own workshop and repair facilities.

6. Of the EARC locomotives, Uganda got 27 steam and 21 diesel engines. Only four of the 27 steam engines are serviceable, and with maintenance facilities in neither Uganda nor Kenya (now that the steam workshop there has closed) even these four are expected to be out of service within a few months. Of the 21 diesel engines, 18 are out of service but being worked on at the Tororo workshop, with the help of German technicians.

7. To supplement the former EARC locomotives, six shunting engines and 10 short-range engines have been purchased from Germany. With these now in operation, the current diesel engine situation is this:

¹ Last year Transocean (Uganda) Ltd. subcontracted for 400 Kenyan lorries at a cost of Shs. 200,000 per lorry per year, to carry export production from Uganda. At the present time there are about 100 Kenatco lorries carrying Coffee Marketing Board coffee out of Uganda at about Shs. 780 per ton, over Shs. 300 a ton more than the rail shipment cost from Kampala to Mombasa. (The expected capacity of the Uganda transport sector to export coffee over the next two years is discussed in the foreign exchange chapter of the Commonwealth report).

	Total	In-Service	Out-of-Service
35 class (shunters, British)	6	-	6
72 class (med-range, ")	5	1	4
36 class (new shunters, German)	6	6	-
61 class (short-range ")	10	2	8
62 class (new short-range, German)	10	10	-
TOTAL	37	19	18

8. To provide the capacity to haul main-line trains, 14 heavy locomotives have been ordered from France and 20 medium-range locomotives from Germany. These are due to arrive in 1979, and have been partly paid for.¹ On the assumption that the out of service diesels can be repaired (this is a high-priority reconstruction project), the old fleet plus these new locomotives will provide Uganda Railways with sufficient motive power to handle the level of rail traffic that was reached in the late 1960s and early 1970s.

9. Because EARC rolling stock moves between Kenya and Uganda, the number of units in Uganda varies from time to time. Just after the war, there were about 47 covered wagons from the old fleet and 132 open wagons in the country, the combined total of which is well short of the 925 wagons Uganda had expected to have, on average, following the break-up of the EARC. To supplement this meagre supply, 130 covered and 20 goods wagons have been purchased from Belgium and are now in use. An additional 250 covered wagons (plus 20 coaches) have been purchased from India and paid for, except for Shs. 25.6lm. in transportation charges for which the Indian Government has recently extended credit. 50 more coaches and 34 service cars have been ordered from East Germany. When these all arrive, the Ugandan rolling stock should be sufficient to handle reconstruction-period traffic. Subsequent growth and development will require yet more rolling stock, including several hundred fuel tankers to displace less efficient long-distance carriage of petroleum products by road and by barrel.

10. Many sections of the permanent way are laid with light, deteriorating rail. Signalling, aside from simple mechanised signals at stations, is virtually non-existent, and the communications system relies on radio calls and telephones. Main-line traffic from Kampala to Mombasa has been monitored using computer facilities in Nairobi with a terminal linkage in Kampala. A new system, with which the Kampala terminal is not compatible, will be introduced in Nairobi in July, from which date Uganda Railways will no longer be able to keep direct track of its main-line trains or cargo. These current problems are addressed in the next section on reconstruction needs.

11. Of major significance to the development of Ugandan rail services is the decision that was made by the military regime in 1978 to increase the rail-wagon ferry capacity on Lake Victoria. Until the breakup of EARC in 1975 Uganda did make some use of the alternative ocean outlet by ferry from Jinja to Mwanza, and then over Tanzania rail to Dar-es-Salaam. In the late 1960s consideration had been given to providing a separate ocean outlet for Uganda by constructing an extension of the Moshi/Arusha line in Tanzania to the Lake Victoria port of Musoma, and so providing a direct Ugandan link through Tanzania to Tanga. Whatever the original motivation for the military regime's decision to increase wagon-ferry capacity on Lake Victoria, the outcome is in consonance with the friendly relations that have been re-established between the two countries.

12. A Belgian firm has been contracted to provide floating dry dock facilities at Port Bell, which will be used to assemble four wagon ferries each with a one-way load capacity of about 800 net tons of cargo. The dry dock, which is now under construction

¹

For a summary of these orders and other components of already-contracted development and reconstruction expenses, see Table 16.3.

is due to be completed by about the end of October 1979, and the first new ferry will be ready to be commissioned 11 months after that. Subsequent ferries will be completed, if no problems arise to interrupt production, at four-month intervals. Thus, it is anticipated that the four new ferries could be in service by the end of 1981.

13. With the existing Tanzanian ferry that has been operating twice weekly between Jinja and Mwanza since mid-May 1979, the Lake Victoria portion of this alternative route to the ocean will have a maximum capacity of about 600,000 tons a year. More realistically, its operating capacity might be set at about 400,000 tons a year.

14. It is worth noting, first, that while this capacity may be roughly equivalent to export-traffic demand during the initial year or two of reconstruction, it is only half the rail-export tonnage (including transit cargo) of the early 1970s and late 1960s. Thus, access through Mombasa will have to be retained, at levels more or less equivalent to those of the last few years - at least until additional capacity is provided on Lake Victoria. It is clear, as well, that 400,000 tons one way annually across Lake Victoria could not readily be handled by the port of Dar-es-Salaam. Decisions already made and contracts committed ineluctably point to a renewed and vigorous interest in a northern Tanzania rail line from Musoma to Tanga.

15. However, enthusiasm for a new ocean outlet must be balanced by an appreciation of the costs involved in creating a Tanga line in addition to the port facilities there. Any adequate analysis of the merit of such a major investment should consider the physical alternatives available and the political constraints that may exist on the use of these facilities. In this case, both the Kenyan rail line and the port of Mombasa have the physical capacity easily to handle Ugandan traffic. It is in the economic interests of both Uganda and Kenya to work towards a resolution of the problems that have so effectively limited the availability of these facilities. The enlarged Ugandan rail-ferry fleet that will shortly emerge on Lake Victoria, and the possibility that this permits of alternative ocean access through Dar-es-Salaam, provides Uganda with some security, and introduces an additional competitive element into traffic that has so far been monopolised by Kenyan interests. While it would be wise to allocate a modest amount, say Shs. 500,000, for the purpose of updating the costs of the Musoma-Tanga rail and port facilities, and reporting on the capacity of Dar-es-Salaam port and the Mwanza to Dar-es-Salaam rail line, the major effort for the purpose of providing Uganda with more efficient export-import facilities should, in our opinion, be spent on attempting to resolve the difficulties of moving goods through Kenya. If high levels of goods movement through Kenya can be re-established, the construction of a dry-port facility at either Tororo or Kampala, as has been proposed by Ugandan officials, should be seriously considered.

16. In the end, of course, political constraints may compel Uganda and Tanzania to proceed with either an expansion of port facilities at Dar-es-Salaam or the construction of a Musoma-Tanga route.

17. Contracts have been let for the development and reconstruction proposal shown in Table 16.3. The future obligations that these entail will bear on a Corporation that is not now able to meet essential operating expenses from operating revenues. Given the importance that we place on shifting long-haul traffic from road to rail, this is one of the public corporations that must be included in the refinancing plan we called for in the previous chapter, and which is elaborated upon in the financial chapters of this report.

Reconstruction

18. The direct consequence of war damage, so far as can be determined, was to undermine the ability of URC to function administratively: offices were damaged, furniture stolen and supplies ransacked. There was some damage to the permanent way within Kampala, and at least two bridges were out of action on the Kasese line. However, temporary repairs have now been made to this line.¹

¹ At the time of writing, the security of the Lira-Gulu-Pakwach branch had not been assured, and the extent of damage along this line not fully determined. It is known that stations were looted and communication facilities along this branch completely destroyed, but it is believed that the permanent way is intact.

19. The reconstruction of administrative capability, including the repair of stations and offices, is first in order of importance, at an estimated cost of Shs. 15m. Service and railway maintenance vehicles were stolen or damaged and must be replaced, at an estimated cost of Shs. 10m., phased over several years. Telecommunication facilities, which were rudimentary before the war, were completely wiped out by the fighting. As an emergency measure, communication among points on the rail system must be restored, at an estimated foreign exchange cost of Shs. 2m. Over a longer period, the design and installation of a more sophisticated system is necessary, and a preliminary expenditure towards this in 1980/81 may be warranted.

20. A connection with the new Nairobi computer facilities must be made at a cost of roughly Shs. 3m., if Uganda Railways is properly to cope with the anticipated increase in traffic flow to and from Mombasa. There seems little point in developing new computing capacity in Kampala in the short-run, if a satisfactory arrangement to use the Nairobi facility can be negotiated.

21. Finally, during the rehabilitation period, necessary repairs to the permanent way must be undertaken, and repairs to the current fleet of wagons should continue.

Table 16.3

Foreign Exchange Costs of Railway Development
For Which Contracts Have Been Negotiated
(Shs. m.)

Project	Foreign Cost	Amount Paid	Outstanding Balance
1. 20 medium locomotives, West Germany	141	42	99
2. Spares for 1	9	1	8
3. 14 heavy locomotives, France	165	17	148
4. 250 covered wagons, India	43	43	0
5. 20 coaches, 3rd class, India	21	21	0
6. Transportation for 4 and 5	26	0	26
7. 10 coaches, 2nd class, East Germany	18	0	18
8. 40 coaches, third class, East Germany	56	0	56
9. 34 service cars, East Germany	56	0	56
10. Spares, transportation and interest, various projects	39	5	34
11. Lake Victoria ferries, Belgium	393	219	174
12. Other marine projects, Belgium	192	0	192
13. Nalukolongo workshop, West German and Swiss	216	32	184
Total contracted	1,375	380	995

Source: Based on information in Uganda Railways Corporation, Report on the Current status of the Uganda Railways Corporation, April 28, 1979; and Uganda Railways Corporation, Rehabilitation, Improvement and Development 1979/81, April 7 1979 (Should be dated June 7, 1979).

Table 16.4
Recommended Railway Rehabilitation Programme
(Shs. m.)

Project	Estimated Total Foreign Cost	Desirable Staging				
		1979/80		1980/81		After 1981
		Foreign	Local	Foreign	Local	Foreign Only
1. Balance of already contracted projects from Table 16.3	995	200 ¹	50 ¹	200 ¹	50 ¹	595
2. Building repairs and office rehabilitation	15	8	2	7	2	-
3. Service vehicles	10	4	-	4	-	2
4. Telecommunication	52	2	1	10	-	40
5. Computer facilities	3	3	-	-	-	-
6. Permanent way, repairs and reconstruction	550	50	25	50	25	450
7. Repair of current fleet	34	22	-	12	-	-
8. Signalling	50	-	-	10	-	40
9. Rolling-stock spares	66	-	-	44	-	22
10. Port Bell Terminal	20	-	-	20	5	-
11. Reconstruction of Kampala-Port Bell- Namanve line	25	-	-	10	10	15
12. Training school	25	-	-	-	-	25
13. Wagons, coaches and tankers	469	-	-	-	-	469
TOTAL	2,314	289	78	367	92	1,658

Source: Costs are based, with some adjustments, on information in Uganda Railways Corporation, Report on the Current Status of the Uganda Railways Corporation, and Uganda Railways Corporation, Rehabilitation, Improvement and Development 1979/81.

¹ Estimated from very generalised information about the terms of each contract.

22. The preceding projects are listed as items 2 to 7 in Table 16.4, with summarises our recommended programme of railway rehabilitation. Further development, beyond the immediate needs, will have to take account of the inability of the present dock and wagon-ferry loading facilities at Jinja to handle the five ferries that are to be in service by 1982. The railway has proposed, and it seems to us sensible, that Port Bell be developed as a second terminal. Rail service to Port Bell, which at one time was on a branch line, could be developed in conjunction with the re-grading of the main line between Kampala and Jinja. The construction of dock facilities at Port Bell and the development and re-grading of the rail line are expected to have a foreign exchange cost of about Shs. 45m., according to Railways estimates. These are shown as projects 10 and 11 in Table 16.4. Work on these projects must be started in 1980/81, if the wagon-ferry fleet is to be used to full capacity as the new vessels become available.

23. The last two projects in Table 16.4, the development of a railway training school and the expansion of the wagon stock (especially the purchase of petroleum-product tankers) are suggested for consideration after the two year rehabilitation period.

24. Immediate technical assistance is needed by URC in the fields of signalling and telecommunication, in mechanical engineering (to help with the maintenance of locomotives and the establishment of the Nalukolongo workshop) and in civil engineering. Donor countries might be interested in supplying this technical expertise under a bilateral aid programme. An approach to the IBRD for support of the overall railway programme should be made as soon as possible.

ROAD SERVICES

25. In order to provide scheduled freight services to the areas beyond the reach of the railway, URC has operated five 10-ton lorries and four 10-ton trailers on the Kampala-Hoima-Masindi route. It also contracted with a private carrier to provide service from Arua to rail head at Pakwach. All of the Corporation lorries were stolen during the liberation fighting.

26. These past railway road services, and their expansion to Kampala-Masaka-Mbarara and Kabale-Kasese all seem warranted. Given the shortage of private vehicles in the country, it seems appropriate that these services should be developed within the administrative structure of URC. An appropriate reconstruction project would be the provision of eight 10-ton lorries with trailers, at a cost of about Shs. 3m.

INLAND WATER SERVICES

27. EARC ran freight and passenger services on Lakes Kyoga and Albert and on the Victoria Nile and Albert Nile until 1962, when heavy flooding around both lakes badly damaged the marine wharves. Until recently, the Corporation has provided some service to the Sese Islands in Lake Victoria.

28. Interest in reviving these services has been persistent. Such revival was recommended in a 1976 consultant's report, and new inland water-way vessels and wharfs on Lake Albert and the Albert Nile are called for under the terms of the contracts signed with the Belgian shipbuilders who are supervising the construction of the new Lake Victoria ferries.

29. We do not regard the development of new inland water services as a rehabilitation project, but further planning for these facilities might well be undertaken over the next two years.

ROAD NETWORK

David M. Nowlan and Donald F. Peckham

Background

This chapter considers the need to rehabilitate the national road network. Responsibility for the network is divided into four areas of control.

2. The Ministry of Works has responsibility for the nation's major trunk road network. This has a total length of approximately 7,000 kms., of which about 2,000 kms. are sealed. Previously, responsibility for this network was vested in the former Ministry of Works and Housing. For administrative purposes, Uganda is divided into four regions which are centred around Kampala, Fort Portal, Mbale and Gulu. Each region is subdivided into three or four districts under the control of a district engineer with appropriate staff and facilities. The overall Administrative Headquarters is at Entebbe.
3. The Ministry of Regional Administration and Local Government has responsibility for the balance of the public road network, both urban and rural. The Ministry has other functions such as control of open spaces, drainage, street lighting, refuse collection, etc., and estimates or rehabilitation costs in this chapter allow for these functions.
4. Rural Local Authorities: these have responsibility for the construction and maintenance of some 20,000 kms. of secondary roads, virtually all of which are unsealed. The authority operates with 25 districts, and has the power to levy taxes in order to finance services.
5. Urban Authorities: established urban centres such as Kampala and Jinja have responsibility for the construction and maintenance of the road network within their urban boundaries. Because of high traffic densities in these areas, road conditions are generally worse than in the rural areas. There is no maintenance on the trunk roads within the urban areas. Discussions with senior officers in Urban Authorities and the Ministry of Works elicited the opinion that each believes the other Authority is responsible for these lengths of road. Consequently no maintenance has been carried out for many years and this is reflected in the urban trunk road conditions.
6. We are of the opinion that immediate direction must be given to each Authority as to the sections of road under their control and that the urban trunk road system responsibility should rest with the Ministry of Works.
7. Finally, estate roads are the responsibility of the various agricultural estates and form an essential part of the road network for the movement of produce within the estates. The proper care and maintenance of these roads must be achieved in order that produce may be moved on an all-weather basis. Requirements are comparatively modest and contract grading and resheeting on occasions would be sufficient treatment. It is important, however, that estate roads be maintained on this basis.

Introduction

8. Uganda's transportation capacity has been decimated both by years of neglect and also by looting during the liberation war. It is important now to consider the capability of the road network to carry the expected increase in the number of vehicles. Road repairs are time consuming and therefore must be considered an immediate priority.
9. Sections of road in the urban areas of Kampala and Jinja have been inspected. Lengths of trunk and minor roads, both sealed and unsealed, were inspected in eastern and western Uganda. As a result of these inspections and discussions with various officials, the priorities for rehabilitation are clear. Many lengths of sealed roads are at a critical point of rapid degeneration due to lack of routine maintenance. This is evident from the number of sizeable potholes which are untreated and the great lengths of shoulder erosion. Pavement deformations are developing in many areas.

Drainage lines are generally not functioning and there is evidence in many areas of pavement structural deficiencies, relative to present day axle loadings. Unsealed roads are in a similar state of disrepair.

10. From our observations, we have reached the opinion that:

- a) The routine maintenance organisation must be made effective;
- b) Mobile heavy maintenance units for resheeting and resealing should be established on a direct labour basis;
- c) Associated with b) above quarrying capacity must be regenerated;
- d) Workshop facilities must be rehabilitated;
- e) The Materials Testing Laboratory at Kireka must be re-equipped;
- f) The Road School for training technicians should be re-established;
- g) Road design capacity should be restored;
- h) Road construction programmes should be re-evaluated and apart from necessary projects, such as the access road to the Katwe Salt Factory, construction programmes should be deferred until after the 1980/81 rehabilitation period;
- i) Some heavy maintenance and resealing in the rehabilitation period will have to be carried out by contract. The aim should be to develop a balanced direct labour and contract operation beyond the rehabilitation period;
- j) Maximum use should be made of existing organisations and capital installations which have proved successful in the past.

Problems and Policies

11. The road network is here considered as an entity. It is important to accept that information is not available from the northern areas of Uganda because of security imposed as a result of the recent liberation war. Specific facts are quoted, where known, as examples and general conclusions are based on the data known to apply in the southern areas. As stated in the introduction, maintenance must be considered the first priority. We are of the firm opinion that maintenance must be restored to reasonable levels within the next two years. If this aim is not achieved, then the much more costly task of considerable reconstruction, over and above that which is now necessary, will have to be faced.

War Damage

12. Damage to roads and bridges as a direct result of the liberation war is assessed as remarkably light. Some minor bridges and culverts have been demolished but the only evidence of this during our inspections was near Mityana on the Class II murrum road between Kampala and Fort Portal. No reports of other damage to road structures have been received. The office and storage complex at Mbarara was damaged by rocket or shell fire during the liberation war.

13. The results of looting and wanton destruction during, and immediately following, the liberation war are of a far more serious nature. In summary a reasonable overall estimate of looting in the various Authorities is:

- 50% of furniture and fixtures wantonly destroyed or stolen;
- 90% of workshop tools and equipment destroyed or looted.
(The central workshops at Kampala have virtually no tools or spare parts);
- 90% of stationery damaged or looted;
- 40% of records lost or destroyed;
- 30% of plant lost or destroyed;
- 95% of vehicles lost or destroyed.

14. These percentage estimates were submitted to us by senior civil servants and are considered reasonable following inspections to selected areas.

15. As an example, the following list of road maintenance equipment available to the

Ministry of Works in December 1978, compared with that lost during the war, indicates the seriousness of the situation in this area.

<u>Items</u>	<u>No. in 1978</u>	<u>No. lost during War</u>
Tipppers	46	31
Flat lorries	16	12
Graders	35	10
Water tankers	4	2
Steel wheel rollers	-	-
Heavy vibrating rollers	5	-
Light vibrating rollers	10	4
Bitumen heaters (handspray)	8	3
Bitumen tankers	1	1
Tractors and trailers	12	8
Traxcaters cat. 951C	10	3
Bulldozer cat. D8	-	-
Diesel pumps	4	2
Premix mixall	2	-
Land rovers	16	16

Notes: 1. Tipppers are used for road maintenance, and flat lorries for housing construction.

2. The plant which has been saved is in poor condition and generally not able to work. Heavy overhauls are required.

3. The situation with the Construction Divisions of the various Authorities is similar.

16. The losses and dilapidated state of the retained plant has resulted in the collapse of the road maintenance system. During the inspection of approximately 1,000 kms. of trunk and minor roads this statement was confirmed, as the few gangs seen working were invariably cutting grass on the shoulders and in the drains. Very occasionally there was evidence of attempts to repair potholes but this was with the use of soil dug from the side of the road which was most unsuitable in quality.

17. The effect of war damage and looting is very serious in the workshop areas. During inspections various workshops were visited. Looting has resulted in few basic tools being available in the workshops at Kampala, Fort Portal and Jinja. Very few tools were retained at Mbale while the Ministry of Works workshop at Mbarara has been taken over by the military authorities and seemed to have a reasonable number of tools to permit the repair of military vehicles. In all centres, store rooms have been forcibly entered and spare parts looted. Essential items such as batteries, oil filters, fan belts. etc. have disappeared for all types of vehicle. As a result of the looting of tools and spare parts it is impossible to repair or maintain the few vehicles which have been recovered. A similar situation exists in the workshops and stores of private companies. For example, the Tata Company had established a well equipped central workshop in Kampala with smaller agencies throughout Uganda. None of these centres is known to be operational.

18. The Ministry of Works' Materials Laboratory is situated at Kireka on the outskirts of Kampala. The complex was visited. It was apparent that as a result of looting the laboratory cannot function. A full list of broken and lost equipment is on file and the re-equipping of this unit must be regarded as of very high priority, since the rehabilitation of roads will require strict quality control. Apart from quality control an essential function of the laboratory is to locate sources of road making material. The restoration of these and associated functions is considered to be

of great importance as the opening of new pits will reduce haulage loads and therefore reduce costs. The service of the Laboratory should be available to all Authorities.

19. The Ministry of Works' Road School is not functioning because of the effects of the liberation war. We consider it to be important to re-equip the school in order that the technical personnel of all of the Road Authorities may benefit from standard tuition.

20. Various ferry links are an integral part of Uganda's road network. Reports received indicate that these have been severely damaged during the fighting. We were unable to inspect any of the ferry services but suggest that a local evaluation of damage should be made as a matter of high priority.

Period 1970-79

21. From comments and facts received it is reasonable to state that the general level of finance allocated and the personnel structure were satisfactory in the late 1960s. Maintenance levels and road improvements were comparable with those in other countries. International bodies such as the World Bank, the Commonwealth Development Fund, etc. provided loans and grants for specific projects and technical assistance where appropriate. Uganda had, in 1970, the ability and financial capacity to implement the proposals of the National Development Programme.

22. By the end of the 1970s, the situation had changed dramatically. Regravelling in 1978 was 10% of the 1970/71 level, and the cost of regravelling is now Shs. 100,000 per km. compared with Shs. 7,000 per km. The cost of resealing is now Shs. 300,000 per km. compared with Shs. 24,000 per km. The costs of resheeting, materials, etc have all increased to a similar degree.

23. Associated with the escalating costs was a loss of expertise (both indigenous and expatriate), a decline in discipline, an increasing lack of spare parts; materials such as lime and cement became virtually unobtainable; Government audit ceased to exist, and civil engineering contractors left Uganda.

24. The combined effect of eight years of mismanagement and looting is that Uganda has been left with Road Authorities which do not have the means even to carry out effective routine maintenance.

Effects of Changes in East African Organisations

25. The main adverse effect on the road system was the break-up of the East African Railways. This factor caused an increase in the volume of heavy vehicles and trailers on the road network. The most serious effect is on sections of the Kampala/Kabale road with vehicles destined to and from Kigali in Rwanda and Eastern Zaire. Roads were not designed to carry this volume and are showing signs of failure in various degrees.

The Task Ahead

26. To restore the trunk road network to its 1970 level of service within the next two years is an enormous but essential task. Uganda's economy depends heavily on its ability to transport agricultural produce and other commodities efficiently. If the overall road network is not improved to its former levels of service then the cost to the country must be measured in terms of reduced travel speeds, increased use of fuel, rapid deterioration of all vehicles, increased accident rates and the ultimate exceptionally high cost of reconstruction compared with the more modest cost of immediate maintenance.

Policies and Resources Needed

27. With the exception of specific projects, we believe that the first priority for the overall road network is to re-establish the various maintenance organisations. This will require, over the coming two years:

- Tools and equipment for road gangs;

- The refurbishing of depots and workshops;
- Re-establishing plant and vehicle fleets;
- Re-equipping the Materials Laboratory;
- Re-establishing the Road School;
- Making existing quarries operational;
- Locating and operating new quarries - considering the use of mobile crushers on a direct labour basis;
- Establishing a capacity to reseal 200 kms. of road per annum by direct labour;
- Establishing direct labour reconstruction capacity;
- Establishing a direct labour regravelling capacity.

28. We advocate the redevelopment of a capacity to carry out any type of work by direct labour, with the possible exception of heavy earthworks. Experience in direct labour operations is the ideal training ground for inexperienced engineers. With experience in the direct control of plant, personnel and financial allocations, together with the experience gained in overcoming the inevitable problems which arise on all construction works, an engineer is better able to supervise work carried out by contract at a later date. It is, of course, essential that direct labour operations should be established and run efficiently. An efficiently operated direct labour capacity gives an alternative if contract tenders are not competitive. A direct labour capacity to carry out heavy earthworks is not recommended as this operation requires specialised machinery which may not be fully utilised in ongoing projects.

29. We are of the opinion that the aim should be an even balance between direct labour and contract capacities for resealing, heavy maintenance and construction. Routine maintenance should continue to be carried out directly by the various Authorities, as in the past.

30. Routine maintenance must be commenced at the earliest possible date. An urban and rural resealing programme of 20% of total sealed length per year should be aimed for in the coming two years. It is also estimated that heavy expenditures must be incurred with regravelling unsealed roads and strengthening sections of sealed roads. Time and circumstances have not permitted us to suggest a specific priority programme but guidelines are offered and best estimates made.

31. Apart from the structures destroyed in the Mitya, the bridges and culverts along the routes inspected were in reasonable condition. A few culvert sections had collapsed, usually at the ends and not on the carriageways. Repair of these is relatively minor and inexpensive work. Unless reports are subsequently received regarding bridge damage, we are of the opinion that all planned bridge replacements should be deferred until after the rehabilitation period.

32. Previously in this chapter, we stated that construction projects should be deferred with certain exceptions. Our opinions are now offered on this subject.

33. The UNECA report dated May 1976 recommends reconstructing on a first priority basis the following sections of road:

Kampala-Masaka	-	100 kms.
Lyantonde-Mbarara	-	64 kms.
Mbarara-Ntungamo	-	78 kms.
Katunguru-Fort Portal	-	115 kms.

Kampala-Masaka - This section was inspected and pavement strengthening is required on several lengths, especially 0-20 kms. from Kampala.

Lyantonde-Mbarara - Except for low lying areas, this section of road is in relatively good condition. We are of the opinion that the low lying lengths should be strengthened and major patching work be carried out on local failures.

This, followed by selective resealing and proper routine maintenance, should be sufficient for several years.

Mbarara-Ntungamo - We were unable to inspect this section and therefore make no comment.

Katunguru-Fort Portal - With routine maintenance, minor patching and selective resealing we are of the opinion that this section of road need not be reconstructed for at least another five years.

34. The Action Programme, published in July 1977 lists many new construction and reconstruction proposals (p. 155). Work has commenced on some of the projects. We were unable to inspect many of the areas in which work is proposed. However, we note for example that there is a proposal to duplicate the Entebbe Airport Road. The existing road is structurally sound and with proper maintenance will remain so for several years. Duplication is considered to be of low relative priority and beyond the terms of rehabilitation. We are of the opinion that the construction proposals in the programme must be re-evaluated in the light of the heavy financial and material resources needed to repair and retain the existing network. The re-evaluation must also consider the need to open all-weather access to projects such as the Katwe Salt Factory and the improvement of the Katunguru - Ishasha road to encourage international traffic to use the railhead facilities at Kasese. We stress the importance of diverting to rail the heavy loads now carried by road on the grounds of economy of transport and lessening road maintenance costs.

35. Estimates by government agencies of rehabilitation requirements are listed in detail on file. The needs are basically plant, tools, equipment, office restoration, vehicles and workshop facilities. The listed details are considered reasonable in all areas except the claimed requirements for the rural Local Authority districts. In this area the claimed needs would give a capacity over and above any which has existed in the last 10 years. This, of course, may be desirable but in principle goes beyond the definition of rehabilitation. Even if such needs could be justified we are of the opinion that such an expansion of capacity could not be managed efficiently over the next two years. Accordingly we have based our financial estimates in this area on more modest requirements.

36. The detailed lists have been costed as accurately as possible and are shown in Table 17.1.

Table 17.1
Costs of Rehabilitation
(Shs. m.)

	1979/80		1980/81	
	Foreign Exchange	Local	Foreign Exchange	Local
Ministry of Works Direct Labour - maintenance	80.0	15.0	67.0	9.0
Ministry of Works Contract - maintenance	70.0	15.0	70.0	15.0
Ministry of Works Contract - construction	60.0	15.0	60.0	15.0
Local Authorities - urban	40.0	15.0	40.0	15.0
Local Authorities - rural	50.0	10.0	40.0	5.0
TOTAL	300.0	70.0	277.0	59.0

37. The costs shown in Table 17.1 do not include local wages, etc., and solely indicate capital expenditure on plant and equipment, etc., needed to permit the various

Authorities to function effectively. Spare parts and imported materials are included in the estimates.

External Assistance

38. The following bodies have given loans to the Government:

Arab Bank for Economic Development

The funds from this Bank are for the construction of the Pakwach-Arua road. The Project is ongoing.

The African Development Bank (ADB)

A financial loan agreement was recently concluded with the Government for the construction of Equator Road which is the last segment in Uganda of the Trans-African Highway (TAH). The operations have not yet started. The ADB gave the Government a grant (from Sweden) for the feasibility studies of the Kampala-Mukono-Lugazi Road improvement to dual carriageway. These studies were completed at the beginning of this year.

The EEC

The Community, through the EDB, recently gave the Government a grant for the detailed engineering and design of the Lake Katwe Salt Project Access Road. The job had started when the war intervened.

IBRD/IDA

The World Bank under credit UG-164 (the second Highway Project) had agreed to use the balance on the Credit - about US \$700,000 for the replacement of Ishasha Bridge on Bulema-Kayonza Tea Road in Ankole, but because of the war this work could not be started. Within the same credit technical assistance was also provided.

Recent Offers of Assistance

We are advised that the following offers of assistance have been made and will reduce the costs shown in Table 17.1.

EEC - Shs. 20m. (general roadworks)

UK - Shs. 3.75m. (rehabilitation of the central workshop, Kampala i.e. Ministry of Works).

39. We are of the opinion that donor aid should be sought and directed into programmes based on new priorities. We have attempted to offer guidelines for the fixing of priorities and this exercise must be completed as soon as internal conditions permit.

40. Historically Uganda has relied on contractors to supply the expertise and equipment for major construction and sealing works. As previously stated we are of the firm opinion that an increasing capacity to carry out some of these works by direct labour is essential on the grounds of economy and as training for indigenous engineers. To establish this concept it would be appropriate to request the secondment of capable engineers and foremen with the experience and willingness necessary to guide indigenous staff through the period of establishment. If aid is forthcoming on an international basis it may be appropriate to request the appointment of selected staff from a country such as Australia which has a surplus of engineers and technicians. This approach would give consistent advice at a technically competent level.

41. At this point it is not possible to estimate the numbers of expatriate staff needed. This will depend on factors such as the number of suitably qualified and experienced Ugandans who will return from exile and the rate at which plant and equipment etc. is purchased or donated. However, we are of the opinion that town planning, mechanical engineering and architectural assistance will be required in the urban areas.

We are also of the opinion that experienced construction, mechanical and bituminous sprayer engineers and foremen would be of benefit throughout the period of rehabilitation. The approximate numbers, depending on previously discussed factors, would be 15 professional and 10 technician expatriates.

42. Donor nations may offer to supply plant and equipment but it is stressed that in accepting such offers the Government should be aware of the complications which will arise if plant and equipment is not matched and is received from many various areas. The value of spare parts held, variety of maintenance machinery needed and the difficulties of spare part distribution could reach intolerable levels.

Recommendations

43. We recommend that the following course of action be adopted within the period 1979-81:

- re-equip and activate routine maintenance organisations;
- retain and re-equip existing central, regional and district administrative and workshop centres;
- carry out an extensive resealing programme by both contract and direct labour;
- carry out a resheeting or pavement strengthening programme by both contract and direct labour;
- restore quarrying capacities both by base and mobile units;
- re-equip the Materials Testing Laboratory at Kireka;
- re-establish the Road School for training technicians;
- restore planning and design capacities;
- initiate a construction programme based on new priorities;
- seek donor aid for specific projects, plant and equipment and expertise.

ROAD TRANSPORT

David M. Nowlan and Donald F. Peckham

Background

The capacity of the road transport sector to carry goods and passengers was slowly ground down during the 1970s. From the beginning of the economic war and the expulsion of the Asians in 1972, the rate at which vehicles were imported dropped, as the data in Table 18.1 suggest, and the amount of foreign exchange allocated to official imports of vehicle parts diminished.

2. Rapid deterioration of the vehicle fleet followed. In 1976, an ILO mission examining road transport in Uganda estimated that the output of the sector was only 25 to 30% of its output in 1971/72, and that over 50% of all commercial vehicles were immobilised.¹ Even by late 1973 and early 1974, serious problems had appeared. Of the roughly 7,000 heavy commercial vehicles registered then, a national survey showed that only 4,061 were actually operating.

3. Nationalisation and reorganisation within the transport sector accompanied the economic war. A large private bus company was nationalised in 1972 to become the publicly owned Uganda Transport Company, which was later divided into Uganda Transport (1975) Company Ltd. (UTC), serving primarily Kampala and the western part of Uganda, and People's Transport Company Ltd. (PTC) with headquarters in Jinja, which serves that city and the eastern part of Uganda. The government owned Uganda Taxi Services Ltd. was formed in 1976 to provide luxury taxi service for government purposes and tourists. In addition to these public corporations, the Transport Licensing Board estimates that there are about 160 private operators licenced to provide bus services over specified routes.

4. Table 18.2 shows the steady decline that has occurred over the years in the number of buses and taxis licenced as public service vehicles (PSV), usually to serve specific routes. The number of mini buses and country taxis combined has remained more stable.

Table 18.1

Selected Categories of Vehicle Imports, 1970/76

Type	1970	1971	1972	1973	1974	1975	1976
<u>Buses and Minibuses, total</u>	201	149	67	27	157	169	77
Buses with more than 14 seats	n a	n a	n a	n a	122	90	12
<u>Lorries and Service Vehicles, total</u>	2555	1347	661	227	377	522	324
Lorries, 3 tons or less	n a	n a	n a	n a	107	210	142
Lorries, greater than 3 tons	n a	n a	n a	n a	159	212	8
<u>Bicycles</u>	10437	11811	6072	10581	1103	1242	1625
<u>Automobiles</u>	9553	3397	1725	395	326	775	521

Source: East African Customs and Excise Department, Annual Trade Report of Tanzania, Uganda and Kenya, annual issues.

5. However, these Licencing Board figures do not tell the full story of PSV services available to the public. Many route licences are kept open, even though the routes may be badly underserved, or not served at all.

¹ See A. Cichowsky, Report on ILO Mission to Uganda concerning Assistance to Road Transport, Geneva, July 1976.

Table 18.2

Public Service Vehicles Licensed By Transport Licensing Board

	1971	1972	1973	1974	1975	1976	1977	1978
Buses	593	715	548	529	475	453	388	404
Minibuses	149	168	150	146	280	359	758	1139
Country taxis		870	1703	1526	1281	805	907	649
Rental taxis	149	225	212	350	389	282	205	48
Tourist taxis	254	199	167	109	36	22	46	39
Town taxis			237	113	62	19	7	5

Source: Uganda Transport Licensing Board

6. Figures from UTC illustrate the situation. In 1972, the bus company had licences for vehicles on 50 'town' routes (all in Kampala) and 60 'country' routes. All were served on a regular basis. By 1978, the company still held licences for the 50 Kampala routes and had acquired 13 more country routes, for a total of 73 country licences. Only 10 of these country routes were actually being served, and perhaps 20 or so of the Kampala routes had irregular services, as buses were juggled from one route to the other in order to provide some service some of the time.

7. The Transport Licensing Board has neither the staff nor resources to keep track of bus services actually available. It has been trying without success for three years to get regional offices established, a move that might enable it more easily to monitor needs and service; but the current situation is so bad that many operators must bring their buses each year from up country to Kampala for the annual inspection - if they happen to miss the once-a-year tour by the inspectors to major towns.

8. The growth of unserved bus routes reflects the fact that by 1978 most of the publicly owned bus fleet was out of service. The deterioration of the fleet owned by UTC is dramatically illustrated in the following figures supplied by the company:

Condition of Uganda Transport Bus Fleet

	<u>1972</u>	<u>1973</u>	<u>1974</u>	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>
Total buses	157	229	256	305	305	305	103
Number operational	135	125	100	83	62	38	35

9. A similar, though slightly better, situation prevailed at PTC: in January 1979, 34 of their 59 buses were operating.

10. The same pattern of reorganisation and fleet deterioration occurred after 1972 in the freight industry. The publicly owned Transocean (Uganda) Limited became primarily responsible for clearing, forwarding and transporting international traffic. (We understand that small, private firms handling these same operations have been allowed to appear during the last year or two). For internal movement, the most important agency to emerge was the Uganda Cooperative Transport Union (UCTU), an 'apex' organisation within the cooperative movement designed to import and sell vehicles and parts to cooperative unions and societies, and to 'top-up' transport demand by unions with its own fleet of lorries.

11. Notes prepared by UCTU state that cooperative agricultural unions and primary societies had available to them in 1972 less than 400 lorries to meet what was estimated to be a demand for 800. Data from a year or two later show that these unions and societies actually owned only 88 lorries. During the period from then until 1978, UCTU sold to them 360 lorries (some with trailers) and 83 service vehicles.

12. By 1977, the Government had become quite conscious of the disintegration of the vehicles fleet and proposed in The Action Programme,¹ the purchase of 500 buses and 4,000 lorries over the three-year life of the programme. Ministry of Power and Communication officials estimated that 200 buses and 2,000 lorries were actually imported during 1977 and 1978. We are not able to account for the distribution of that number within the country and suspect, in the absence of further information, that these figures are too high.²

13. A major contract was signed in 1977, with the Tata Organisation in India for 1,500 vehicles - lorries, tippers and buses - over the 1977/78, 1978/79 and 1979/80 period. Between 700 and 800 of these had arrived before the war; another 350 to 400 have been paid for. Of these, about 40 have just arrived in Kampala and are ready for allocation; 60 are in Mombasa gradually being cleared for delivery to Uganda; the remainder are in Bombay ready for shipment. The 100 or so Tata vehicles that were in Mombasa immediately after the war (40 of which have arrived) were being held pending the required payment of about Shs. 8m. by the Ministry of Finance for clearing and forwarding. In order to get the vehicles moving, Tata has been clearing them at its own expense.

14. As a final 'background' note, we feel it is important to call attention to the much diminished supply of bicycles and motor cycles in Uganda. Imports were drastically reduced during the military regime, with the result that throughout the country, people have to walk long distances to and from work, or to visit relatives; and the customary use of the bicycle to transport small loads has almost disappeared.

War Damage

15. Vehicles and workshops were particularly susceptible to war damage. Transocean reports that much of their vehicle fleet was taken by the Ministry of Defence, beginning in August 1978, and that the vehicles taken were run into the ground. Of the 35 buses PTC had operating in early 1979, 12 were taken by retreating soldiers of the military regime and 6 others were damaged. Early in June, PTC had only 18 out of their own buses running.

16. UTC had 28 buses stolen or damaged, their files at Masaka, Mbarara and Gulu destroyed and the depots in those towns badly damaged. Damage elsewhere, especially in the north, is not yet known.

17. UCTU estimates that 50% of the lorries owned by unions and private societies have been stolen or destroyed. Damage to or theft of the private vehicle fleet has been extensive, but not something to which a number can readily be attached. Very roughly, the figures available, combined with our own observations, would suggest that in 1970 there were in Uganda about 7,000 - 8,000 commercial lorries, by 1978 there were about 4,000 in operation, and of these about 2,000 are still serviceable. Of large buses, there might have been 600 or so in 1970, about 300 in service in 1978, and perhaps 150 still operating.

Reconstruction Needs

18. Reconstruction of road transportation over the next two or three years should concentrate on:

- the provision of adequate transportation to provide for the movement of the export crops from field to marketing boards;
- the provision of major relief to the bus companies; and
- the importation of one or two hundred thousand sturdy bicycles.

¹President's Office, The Action Programme: A Three-Year Economic Rehabilitation Plan 1977/78 - 79/80, July 1977

²Neither total fleet nor new registration figures for vehicles have been available for some years, largely because Computer Services have not been able to process the raw forms. It is not clear why manual counts of the registration forms were not undertaken in these circumstances.

19. In this reconstruction programme the UCTU can play a major role. They have the organisational structure through which lorries, service vehicles and bicycles can be allocated for sale to unions and primary societies. Their own suggestion for rehabilitation needs in 1979/80 (for both their own use and for re-sale) is shown in Table 18.3. The estimation of truck and service-vehicle needs on this schedule seems realistic, although it might be better phased over two years. Additional pick-up trucks or vans could well be substituted for the 347 staff cars proposed, and 50,000 bicycles should be added to the list for resale to individuals through unions and primary societies.

20. UTC requires at least 50 buses immediately, an additional 100 in 1980/81, and probably another 100 over the subsequent few years. Experts should be brought in as soon as possible to assess the technical capability of the company for absorbing and properly maintaining the vehicles, and of organising their bus services. Technical help should be supplied, with amount and type based on the initial evaluation of need. If supplies and tools can be provided immediately, UTC estimates that it can put back into service at least 60 of its 100 buses that are not now serviceable. About Shs. 2m. in local funds will be needed to repair war damage to depots and other buildings.

21. PTC seriously needs about Shs. 2m. in foreign exchange to provide parts and tools to put 25 grounded buses back into service. They need, in addition, 40 heavy-duty country buses, 12 town buses, 4 four-wheel drive buses for hilly routes plus 7 service vans and staff cars. An assessment of PTC's capacity to maintain and repair their fleet should be made in concert with the assessment of UTC. The possibility should be considered of providing the maintenance staff of both PTC and UTC with an opportunity to upgrade their skills at the Uganda Technical College.

Table 18.3

1979/80 Requirements Proposed By Uganda Cooperative
Transportation Union

Vehicle or Accessory	Quantity	Cost in Shs. m.
Heavy trucks with trailers (16-30 tons)	81	18
Medium trucks (6-15 tons)	429	63
Light trucks (3-5 tons)	305	22
Pick-ups (1-2 tons)	553	20
Minibuses	84	4
Land Rovers or vans	129	5
Staff cars	347	8
Staff motorcycles	840	2
Staff bicycles	31,240	14
Bicycles tires and tubes	11,565	10
Batteries	2,785	2
Tarpaulins	1,373	8
Jacks	1,945	1
Wheel spanners	2,785	1
Tool kits	2,785	6
Spare parts for first nine items	-	31
Total Cost		215

Source: Uganda Cooperative Transport Union Ltd.
File Reference UCTU/C/85, 4th June, 1979.

Note: These requirements are based on a detailed consideration of the following agencies: Coffee Marketing Board, Lint Marketing Board, Produce Marketing Board, Cooperative Bank, Cooperative Central Union, Cooperative Alliance, Cooperative Savings and Credit, Wholesale Consumer Cooperative, Cooperative Coffee Processors, Cotton Ginneries, Primary Societies, Private Coffee Processors and UTCU itself.

22. In short, the following summary programme of rehabilitation spending is recommended for UTCU, UTC and PTC.

Foreign Exchange Cost

	<u>1979/80</u>	<u>1980/81</u>
<u>Uganda Cooperative Transport Union:</u>		Shs. m.
Lorries, cars, bicycles and motorcycles	100	74
Spares, tools and tarpaulins	38	20
<u>Uganda Transport Company</u>		
New buses (50 in 1979/80 and 150 in 1980/81)	20	60
Spare parts and tools	10	6
Service vehicles	0.4	-
<u>Peoples' Transport Company</u>		
New Buses and service vehicles	15	7
Spares and tools	2	2

In view of the financial difficulties the bus companies are having and the inflation rate of the last few years, it would be appropriate to raise the schedule rates for PSVs to perhaps 50% above the present rates which were set in October 1976.

25. Within the Government, the transport section of the Ministry of Power and Communications maintains a fleet of vehicles for general government use. During the war they lost 25 lorries and 42 other cars and pick-ups, and also suffered some building damage and office equipment losses. The vehicles will have to be replaced, at an estimated foreign exchange cost of Shs. 10m. in 1979/80 and Shs. 5m in 1980/81.

24. If Transocean is to survive, it has to be virtually rebuilt. This may be the appropriate time to disband or sell Transocean and encourage the Ugandan private sector to take over the import-export functions of the company. Throughout the economy, the need to replenish the vehicle fleet, to bring it towards the 1970 level, must be balanced by the ability within Uganda to service and maintain an expanded fleet. Considering both need and servicing capability, the following total import figures for the next two years would seem to be of the right order:

	<u>1979/80</u>		<u>1980/81</u>	
	<u>Number</u>	<u>Value</u>	<u>Number</u>	<u>Value</u>
		Shs.m.		Shs.m.
Commercial lorries @ Shs. 2m.	1,500	300	1,000	200
Buses @ Shs. 550m.	200	70	300	105
Pick-ups, minibuses, land rovers, etc. @ Shs.0.057m.	1,500	56	1,000	38
Automobiles @ Shs.0.03m.	2,000	60	3,000	90
Bicycles @ Shs. 500	100,000	50	100,000	50
Motorcycles @ Shs. 9,000	2,000	18	2,000	18
Spares, tires, tubes	-	150		150

25. To help fill these needs, the remaining portion of the 1977 Tata contract should be paid and the vehicles shipped from India as soon as possible. This would provide somewhat more than 500 vehicles (lorries and buses), in addition to the 250 now ready at Bombay, at 1977 prices. Consideration should be given to contracting for additional vehicles from Tata; they are half the price of many alternatives, previous power/weight deficiencies and transmission problems seem to have been overcome, and, most

importantly, they have a more advanced servicing system than any other manufacturer already well known in the country.

26. Finally, we want to draw attention to the problem of distributing - or 'allocating', as it is commonly called - the new vehicles to users. The magendo or blackmarket value of most new vehicles in Uganda is, according to our information, about twice the official selling prices, which for Ministry of Commerce sales, is equal to the landed price plus 25% profit. Vehicles destined for specific parastatal bodies give rise to no special problems, provided a reasonable assessment is made of the need of these agencies relative to an agreed set of objectives (such as the three objectives we set at the beginning of this section), and distribution is in accordance with this assessment. But vehicles sold at official prices through the Ministry of Commerce to the private sector may be immediately resold at much higher prices. There is no point in permitting the original, private buyer to profiteer in this way, and much to be said for the Government's selling on the private market at prices much closer to the true prices within the country. Other chapters of this report discuss in more detail this problem of allocating imported goods.

CIVIL AVIATION

David M. Nowlan and Donald F. Peckham

In this chapter we report briefly on two components of civil aviation: Uganda Airlines, and the Airports Section of the new Department of Power and Communication. A third component, the Directorate of Civil Aviation within the Ministry of Power and Communications, is dealt with in the Communications sector of this report.

UGANDA AIRLINES

Background and Current Situation

2. Uganda Airlines was established in 1976 during the difficult, dying years of East African Airlines. When East African Airlines collapsed in 1977, Uganda Airlines became the sole national carrier.

3. From its inception, Uganda Airlines was subject to arbitrary and capricious directives from the Military Government. According to a current report from the Airline, the deployment of aircraft was at the whim of the President, individual ministers and military officers, even to the extent that regularly scheduled runs were interfered with; Airlines' funds were directed to purchases beyond the interests of the company; and staff recruitment and training was government-controlled, in defiance of standards and quality.

4. Services rendered to government ministries and parastatals were generally not paid for. These debts have accumulated to the extent that ministries now owe Uganda Airlines approximately Shs. 50m. Although the airline managed to cover current expenditure with current revenue last year, it is now unable - in common with so many other public corporations - to pay salaries, unless this back-debt can be collected.¹

5. From 1976 to the end of 1978, Uganda Airlines acquired a small fleet of long-range and local-route aircraft: 2 Boeing 707s; 1 Hercules Freighter; 2 De Havilland Twin Otters; 2 Beechcraft; 1 Trislander; 2 Cessnas; and 1 F27 Fokker Friendship. None of these was from East Africa Airlines. One of the 707s was used primarily for cargo runs to and from Europe and the other for passenger services to Jeddah and Karachi, and to Cairo, Tripoli, Frankfurt and London. The Friendship was used for regional international services to Sudan, Kenya, Rwanda and Burundi, and the smaller planes for scheduled domestic service to Masindi, Kasese, Mbarara, Arua, Koboko, Tororo, Soroti, Lira and Gulu, plus charter services. The Airlines' fleet immediately before the liberation war consisted of the aircrafts listed above, less the Trislander which had earlier crashed.

6. During the fighting, one of the Boeing 707s was extensively damaged by the shelling of Entebbe, and is probably beyond repair; the other disappeared and is now reported to be in Tripoli.² Some of the small aircraft were flown by the Tanzanian armed forces to Dar-es-Salaam, from where they are gradually being returned and checked out for airworthiness. Spare parts, maintenance equipment and servicing tools for all the aircraft were either stolen or damaged; the Airlines' offices in Kampala and Entebbe were ransacked; and most of the ground-handling equipment was either damaged or stolen. Warehouses owned by the Airline were broken into and so extensively damaged that the company now has no storage facility for cargo.

¹ Additional components of the financial situation of the Airlines, as we have been told it, are these: a total of approximately Shs. 8.6m. in foreign exchange is owed to Egypt Air, BP/Shell and Zimex Aviation which operated Uganda's two Boeing 707s; another Shs. 52.5m. is owed on a half-paid Fokker Friendship which has been ready since September for delivery from Europe.

² Insurance compensation for both is being negotiated.

Reconstruction

7. Immediate reconstruction must focus on re-establishing the administrative and goods-handling capability of the Airlines, and on its ability to service its small aircraft, the F27 Friendship and the Hercules freighter. In undertaking this reconstruction, the Airlines should be guided by its present air-fleet capacity, and not attempt immediately to re-establish itself in the field of long-distance, international passenger movement. Internal domestic service should be gradually restarted, and the Friendship or Twin Otters used for servicing runs to neighbouring countries. The Hercules is available for cargo service.

8. Any expansion beyond this present fleet should be explicitly justified by an analysis of profitability. The most likely extension, on this criterion, would be into European cargo services with a Boeing 707 or equivalent aircraft. The Fokker Friendship, now ready for delivery upon payment of the remaining Shs. 52.5m. should also be required to meet the profitability criterion. Some attempt might be made to arrange a Netherlands-sponsored supplier credit for the balance that is owing on this aircraft, if it is decided to proceed with its purchase.¹

9. We have had no detailed estimate from the Airlines of the cost of building repairs, supplies replacement or re-establishment of servicing capability for the existing air-fleet. Roughly Shs. 30m. a year should be enough for these purposes. The company believes that there are Ugandans now working outside the country sufficiently qualified to fill the key vacant posts of chief engineer, financial controller and marketing manager, but that some expatriate help will be needed in the engineering and flight operations departments. The longer expansion of the fleet is delayed, the less will be the need for personnel that must be paid in foreign exchange. A skilled airline manager might well be brought in for six months or so to help the Airlines get re-established administratively.

10. If this cautious strategy of reconstruction is adhered to by Ugandan Airlines, other international airlines should readily be accorded passenger-traffic rights at Entebbe, with contracts that include provision for reciprocal rights to be given to Uganda Airlines in the future if it decides to develop its long-range capacity.

AIRPORTS

11. The Government unit responsible for construction and maintenance of airports, including terminal buildings, electrical systems and rescue equipment, was in the former Ministry of Works and Housing but has now been moved to the new Ministry of Power and Communications. Over time, the airports section of this Ministry expects to improve existing airfields and to construct new ones, depending largely on tourism needs.

12. Immediate reconstruction should concentrate on structural repairs to the terminal building at Entebbe, which was damaged during the liberation fighting, and on some additions to facilities at Entebbe, all at a total estimated cost of roughly Shs. 12m. in foreign exchange and Shs. 6m. in local expenses. Further reconstruction at Entebbe, fencing of upcountry airfields and additions to Soroti² would be warranted in the second year of rehabilitation, at a cost of about Shs. 18m. in foreign exchange and Shs. 6m. local. The British Crown Agents in Uganda have reported in greater detail on the condition of Entebbe Airport and have made specific proposals to bring fire-fighting equipment there up to VC 10 - 707 standards.

¹ In judging profitability, the cost should be reckoned as the balance owing plus any amount that might be returned to Uganda if the contract is defaulted.

² Soroti Flying School, started in 1971 as an ICAO-UNDP project is based at the Soroti airfield. To provide for demand, the construction of a hanger, housing and the extension of the School building have been proposed, along with the acquisition of more airplanes for training. Presumably, the cost of these extensions would be covered by training fees and not a long-run charge on the Government budget.

COMMUNICATIONS

S.E. Kigundo

Introduction

1. Communications, particularly telecommunications, need a separate and comprehensive treatment in the Team report because they are at the heart of government transactions; without an adequate system the administrative machinery for all sectors of the economy would be ineffective.
2. Telecommunications include all forms of point-to-point and broadcast communications, i.e. transmission of information or intelligence by electrical or radio means, and also all methods of radio location and navigation. Telecommunication systems are used to provide a wide variety of services to the public, private and military sectors; we will categorise these services by the transducers they use at their transmitter and receiver terminals, the type of information they convey, and channel bandwidths or bit rates for digital systems.
3. By far the most important services for Uganda today are:
 - Post and telecommunications
 - Broadcast radio and TV
 - Air navigation services
 - Meteorological services

Of the mass media services, broadcast radio has a very much higher penetration than TV and therefore must be considered a much higher priority for rehabilitation; the latest official audience survey report published in 1972 indicated that there were 4.7m. listeners to radio (practically all in their own homes) while there were 0.18m. viewers at home and 0.6m. in public places. There is reason to believe that the number of TV viewers in public places has fallen very dramatically since.

4. The report therefore is divided into four parts according to the above classification. Each part outlines the situation in which each sub-sector finds itself after the liberation war (May 1979), reviews the major events of the last eight years, and compares the post-liberation situation with that of 1970/71. The war damage is described and a reconstruction/rehabilitation plan is proposed based on stated assumptions of policies and resources. Finally some suggestions are made on possible sources of technical aid and finance.

1. POST AND TELECOMMUNICATIONS

5. Uganda Posts and Telecommunications Corporation (UPT) falls under the Ministry of Power and Communications and is responsible for the postal service, telephone and telex (including telegraphy), external (international) telecommunications, and radio frequency allocation and registration within the framework of the IFRB and ITU. This corporation was set up under Decree No. 15 of 1977, basically to take over the affairs of the East African Posts and Telecommunications Corporation (EAPT) and has been operating accordingly since then.

6. The Uganda Region of EAPT and latterly UPT, despite its great importance for the economic and social infrastructure of Uganda, has suffered greatly since the end of 1972. After the departure of non-Uganda Asians in 1972, the headquarters of EAPT in Kampala was 'informally' moved to Nairobi and continued to operate from there until July 1977 when the East African Community broke up. With the headquarters in Nairobi, Kenya and Uganda gradually but steadily started moving apart. Discussions with senior officials in UPT showed they felt Uganda was being increasingly under-served; this apparently manifested itself in a reluctance to sanction new capital projects and replace obsolescent equipment and plant. The supply of loan funds also became more scanty.

7. Another problem that arose about the second half of 1974 was that the free movement of items from the Central Stores in Nairobi to Kampala became difficult, until

eventually Kenya Region declared all items in the Nairobi stores belonged to them. Kampala was cut off from supplies which a year or so previously could be obtained by signing an internal stores requisition. Logically UPT should have started indenting from scratch but insufficient foreign exchange was allocated.

8. Yet another problem arose over training. It became extremely difficult after 1972 for a Uganda Region engineer or technician to obtain one of the overseas training fellowships available to all three partner states of the E.A. Community. And after July 1977 the use of the Central Training School in Nairobi had to be paid for in foreign exchange.

9. It is further estimated that subscribers (telephones, telex, etc.) owe UPT a total amount in the region of Shs. 200m. This has not helped the financial situation of the corporation.

10. One cannot overemphasise the importance of the UPT telecommunications network; every other telecommunication service depends on it. Other parts of this report will explain the nature of dependence and its consequences in greater detail. But the point must be made and underlined that we must get our policies and priorities right for UPT if we are to stand any chance of achieving satisfactory communication services in the other sub-sectors.

Roots of Current Problems

War Damage:

11. On the question of damage suffered by UPT as a direct or indirect result of the liberation war, the report received from a senior official of UPT is at Annex 20.1 in an abridged form.

12. This Annex speaks for itself, but I must emphasise the extensive damage to subscriber installations generally, and Masaka and Mbarara in particular - their exchanges and buildings were completely destroyed. Several junction routes, such as Kampala/Entebbe and Kampala/Bombo suffered far-reaching damage; this also applied to the major radio link stations to the south-west of Uganda.

13. The problem is further compounded by the major damage to the maintenance workshop, including tools, equipment and stores and the looting of practically the whole fleet of vehicles. It is a very grave situation indeed, where even the very basic requirements for applying first aid are not available.

14. Although we have focused here on the actual war damage, we cannot afford to ignore the other far-reaching effects of years of neglect, disrepair and obsolescence. The problem must be crystallised so a solution can be attempted on both fronts. We shall see also that the question of development or extension planning will also influence our policy decisions.

Activity during the Period 1970-79:

15. During the early part of this period, the Uganda Region of the then EAPT lacked sufficient technical manpower and, as a result, only about 75% of any annual development programme was actually executed.

16. Meanwhile the urban growth in demand for services had exceeded the available local and trunk line plant. One effect of this was an ever growing list of 'waiters'; many potential subscribers, especially in Kampala, have been waiting more than four years for service. Another effect was increased exchange congestion and hence accelerated ageing, and further delays for operator-connected calls.

17. Towards the end of this period the problems multiplied and became acute. Much of the plant and equipment taken over by UPT in 1977 was old and obsolete and should have been put on a replacement timetable. The result was that the spare parts for this equipment became increasingly difficult to obtain and were very expensive when found. Further, the useful life of spares in old equipment is short, and such equipment became at best unreliable.

18. Because of the state of the network and the general economic and political conditions in the country, planned maintenance gradually gave way to emergency breakdown repair; there was an increasingly severe shortage of tools, spare parts, fuel (heavy diesel) and transportation generally. In all this there could be no meaningful plan to replace obsolete equipment since a major cause of many of the problems was lack of foreign exchange.

19. Lack of inputs led to an extremely unprofitable use of the available manpower; in fact there was an apparent excess of manpower. Many staff worked under intimidation and had to implement decisions that were professionally of very poor judgement. A glaring example is the Arua satellite project.

20. The service deteriorated so badly during this period that one considers it a miracle that the system did not completely collapse.

21. The major external influence was the gradual disintegration of the EAPT from 1973 onwards as already described above.

The Reconstruction Task Ahead

22. The solutions to these deep-rooted problems will take time and will require a sound framework of policy, reappraisal and finance both in local and foreign currency.

23. But before we move we must take our bearings and map out the course. This means that we must get a quantitative picture of the network, say at the beginning of 1979 and compare it to the situation at the beginning of 1970, take into account the war damage and the proposed development plan, and then begin to work out a solution in a true perspective.

24. Annex 20.2 gives approximate and comparative figures for the state of the network in 1970 and 1979. It must be mentioned that 10 of the 20 automatic exchanges are now obsolete and overdue for replacement. A similar situation obtains for the diesel generating sets, at least 11 of which (accounting for 600vA) need replacement and also the major manual boards including the Kampala AMB.

25. UPT worked out a development programme prior to the fall of Kampala whose main thrust was to:

- extend congested and replace obsolete exchanges
- phase extension of the microwave network to include Entebbe-Kampala-Masaka-Mbarara-Kabala with spurs to Mityana and Bukoba
- replace major standby power generators
- acquire more vehicles for construction, installation and maintenance
- start a number of capital building projects
- acquire a mobile radio monitoring station

It is understood of course that exchange expansion can only be meaningful if accompanied by a reinforcement of the junction and distribution network. The microwave route to the south-west was also planned to carry TV and radio programmes.

26. What makes the rehabilitation of UPT very difficult is the reconciliation of short term measures, which could return the network to 1970 levels in per capita terms, with the certainty that these measures will have to be completely changed within a few years. This is specially significant because we are dealing with a network and not with separate non-interacting entities. Clearly a policy must be defined and made known to all concerned and on it will hang the operational plan for rehabilitation. We shall have definite proposals on this later.

27. There are constraints and obstacles to the achievement of these objectives. The one that stands out most prominently is the financial constraint. Examination of the Corporation's contingent or actual liabilities as at 11 April 1979 gives the following approximate picture:

Local borrowing	Shs. 127.6m.
Overseas loans	144.7m.
Payments outstanding-contractual	86.1m.
International obligations	15.0m.
Capital building programme, outstanding payment	11.5m.

One does not have to delve deeper to see that the Corporation is greatly in debt both in local and foreign currency. The recurrent revenue for the year 1979, which had been estimated at approximately Shs. 269m., may turn out to be no more than Shs. 100m. because of the war.

28. Equipment and buildings are another major constraint. In addition to having to find the local and foreign exchange for the necessary equipment, suppliers very often quote delivery dates of between 9 and 12 months for the principal items. Further, there is doubt as to whether the Ugandan building industry can cope with the sudden demands that are sure to be imposed on it.

29. The gigantic task of rehabilitation will of necessity require much more personnel than UPT has at the moment. Manpower reinforcement in the planning group and at the field engineering level will be desperately required.

Policy Issues and Resources Needed

30. It is recommended that immediate provision be made for the acquisition of the basic tools and equipment that the engineers and technicians need in order to carry out their functions. At the same time, orders for spare parts for existing deteriorated (but still serviceable) plant should be ordered. Then to take the first step towards rehabilitation, a minimum fleet of assorted vehicles should be acquired. A very rough estimate of the resources required for this first step to be taken before the end of 1979 is approximately Shs. 20m., and practically all of it will be in foreign exchange. This figure is only indicative and needs to be refined and cross-checked. This should not be too difficult since UPT have already prepared lists of the requirement referred to in this paragraph.

31. The second recommendation, closely connected with the first, is that funds should be made available to purchase distribution, as well as a limited amount of junction, cable. This recommendation is basically to get the network of Kampala and nearby satellite exchanges off the ground again after the extensive damage. An indicative planning figure here is about Shs. 15m.

32. Recommendation three affects the relationship between Kampala and up-country exchanges and is made in the light of UPT's development plan. The policy here is that a minimum number of circuits must be provided on those trunk routes that were destroyed, on the following priority guidelines:

- (a) Kampala-Entebbe
- (b) Kampala-Mpigi-Masaka-Mbarara-Kabale
- (c) Kampala-Mityana

Even this attempt, pruned to the bones, cannot restore the network to 1970 levels but it must still be done, even if this means doing the work at least twice. The first round would effectively be emergency action to establish some form of communication again, and this may mean having a more extensive radio call system than has been the case before. There is an existing 1KW base station at Kampala with an (extendable) capacity of four channels. But non-government subscribers must purchase their own terminal equipment at a cost of about Shs. 0.5m. each.

33. Round two would probably be to set up a microwave link between Kampala and Entebbe in view of the importance of this route and in the knowledge that the desirable number of circuits on this route today is over 400. The exercise could be completed quickly and at a cost of approximately Shs. 8m. since the sites for terminal and repeater stations have already been acquired. But the delivery dates for the equipment (at best 12 months) may well cause a bottleneck.

34. Round three of recommendation three would be to set up 24 channel vhf links for the routes in (b) and (c). Again the sites for repeater and terminal stations have been surveyed and the acquisition of the land is not expected to be a problem. I envisage that round three will need a lead time of about 18 months. It is difficult to give meaningful estimate of cost here but an indicative planning figure would be Shs. 0.01 m. per route km.

35. Recommendation four concerns complete reconstruction of the exchanges at Masaka, Mbarara, Lira, Mityane and Mpigi. These should be designed and constructed to reflect the current demand for services in those towns. This is a major capital projects plan that may/may not be completed by June 1981 depending on the availability of funds. Much coordination is called for in the case of Masaka and Mbarara with the regional and town planners.

36. Recommendation five is that a start may be made on the extension of the microwave network to the south-west but this is not at all intended for completion before June 1981.

37. Recommendation six is that the building programme as it now stands should be thoroughly revised to bring it in line with the rehabilitation plan thinking. Nevertheless the Mpoma (Mukono) satellite ground station construction programme should go ahead unimpeded. This may require about Shs. 25m. in foreign exchange and Shs. 3m. in local exchange during the 1979/80 financial year.

38. Recommendation seven is that there should be no change in tariffs, but that UPT should make all efforts to collect the Shs. 200m. (approximately) owed to it by subscribers. This will be of great assistance at a time of financial hardship.

39. Recommendation eight would be that UPT in this critical period of reconstruction would benefit tremendously if two very experienced people are recruited in the fields:

- (a) Telecommunications systems planning, and
- (b) Radio system planning. Additional expatriate assistance may be required in the field of switching systems in the areas of both planning and maintenance. Training fellowships for engineers and technicians should also be sought.

The Contribution of External Assistance

40. UPT has foreign debts of the order of Shs. 170m. and over half of this is owed to IBRD.

41. Nevertheless, Uganda - with so many urgent needs laying claim to its scarce resources - cannot effect this rehabilitation alone. It is recommended therefore that Uganda approaches the UNDP/ITU with a project proposal incorporating a large equipment component and an expertise and fellowship component. The EEC and ADB also be approached along similar lines.

42. It is further recommended that bilateral technical and financial aid be sought from Japan and UK.

Additional Remarks

43. The postal services will be restored to 1970 levels when the transport system recovers and some destroyed buildings are rebuilt.

44. But there are other postal needs also, for example:

- Locks and keys for private letter boxes and padlocks for private mail bags.
- P.O. special stationery.
- Date stamps, etc.
- Stamp cancelling machines.
- Strong rooms for Savings Departments.
- Stamp vending machines.

- Weighing scales for letters.
- Printing of postage stamps.

It is estimated these would cost about Shs. 2.5m. in 1979/80 and Shs. 1.5m. in 1980/81.

45. The rehabilitation programme proposed above would have the following financial implications:

	(Shs. m.)	
Telecommunications	146.0	165.0
Postal	2.5	1.5
	148.5	166.5

2. BROADCAST RADIO AND TV

(a) RADIO

Background

46. In Uganda radio broadcasting is carried out by Radio Uganda which is part of the Ministry of Information and National Guidance. Because of its high population penetration it is an extremely useful and reasonably inexpensive vehicle for mass information, education and entertainment. The latest official audience survey report published in 1972 indicates that there were then an estimated 1.1m. sets in homes, for which the average number of listeners per set was estimated at 4.3. The police radio network is not covered in this report for security reasons.

47. All programmes at the moment originate at Kampala through a master control room in Broadcasting House. They are then fed to two short wave (SW) transmitters in Kampala (popularly called the 'red' and 'blue' channels) and beamed out to cover as much of Uganda as possible. The blue channel has been used primarily for Bantu languages and the red one for non-Bantu languages. A total of 18 languages is used.

48. To complement the two SW transmitters in Kampala there are also five medium wave (MW) stations placed in the various regions of Uganda at Arua, Mewagga, Bobi, Kabale and Butaba. Programme information is received by these stations using either or both the off-air reception method and radio relay links. It appears to have been the basic intention that these stations (whose coverage is limited) should transmit in those languages understood in the particular region.

49. In addition, Radio Uganda operates an external broadcast service from Soroti. These programmes are also receivable in many parts of Uganda.

Roots of Current Problems

War Damage:

50. This has been quite extensive. Most of the damage is in the form of looted tools and equipment, vehicles and furniture and fittings. However, three of the nine link stations were totally destroyed and we have received no reports for Arua and Bobi transmitting stations. The presidential mobile recording vehicle is also missing. The extent of the war damage is tabulated at Annex 20.3.

51. In addition to the actual war damage there has been a gradual but steady deterioration in the standard of maintenance of the equipment and an insufficiency of the vital pieces of equipment.

Activity during the Period 1970/79:

52. All studio and transmitter equipment greatly deteriorated during this period due

to the non-availability of spare parts. As a result some equipment was cannibalised to repair other equipment - this in turn led to a state of working with no standby systems or simply at reduced power, or to not being able to handle more than a certain number of programmes simultaneously, and at worst to closing down some services.

53. Professional and technical staff were frustrated because of the lack of tools and other requirements for efficient and meaningful operation. Professional advice was often regarded with contempt and innovation snubbed.

54. The Soroti External Broadcast Station and Arua MW station were built and commissioned (only partly for Soroti) during this period.

External Influences:

55. These have mainly made themselves felt through the regulating effect on the supply of spare parts and equipment. There is reason to believe the statement made by senior officials that harsh and unfriendly terms of payment by many suppliers made the acquisition of spare parts extremely difficult, even where money was available.

56. It has also been put to me that delivery dates for the equipment and other spares were unduly long for Uganda-originated orders. In effect, even before the formal declaration, trade embargoes existed against Uganda.

57. Means of transportation of all kinds of cargo en route to or from Uganda by cargo flights, road, rail and Mombasa port were difficult to negotiate and severe transit damage sometimes occurred.

58. Unscrupulous profiteering companies sometimes managed to get orders placed by corrupt senior officials who did not have Uganda's interest at heart, and even supplied worthless equipment and systems.

The Construction Task Ahead

59. Annex 20.4 gives a panoramic view, under the various headings, of the state of the network in 1970 and 1979. It should be explained however, that of the five news studios, two are incomplete and the remaining three have old and obsolete equipment.

60. The reconstruction task should be attacked from two sides; spare parts, tools, measuring equipment, etc. should be acquired as soon as possible in order to repair the major equipment if that is still serviceable, and new equipment should be acquired to replace what is obsolete, and also to fill the gaps in the gear that a radio network must have in order to function meaningfully.

61. Rehabilitation of Radio Uganda is a gigantic task that will tax the financial resources of the Government since Radio Uganda has no other source of income. Most of the inputs will have to be imported and paid for in foreign exchange. I am informed that Radio Uganda owes Great Britain large sums of money in connection with the MW expansion project, but I have not been able to confirm this myself. Also Brown Boveri of Switzerland has yet to be paid for the second transmitter at Soroti. The income from the commercial section of Radio Uganda would be enhanced if a third channel were opened as recommended in paragraph 67 (a).

62. Another constraint may be construction. The new studios at Nakasero were improvised and as well as being insufficient in number they are inadequate in quality. A new site may have to be acquired for more and better studios. Housing for staff, equipment and offices at the various stations is also inadequate. There are other civil works required here and there; for example sealing the access road and the yard at Soroti will reduce the dust problem and increase the life expectancy of electronic equipment. Another example is that the present UEB power supply to Soroti cannot supply the required power which is in excess of 500 kw.

63. It was not possible to get any figures on the manpower standing of Radio Uganda. But it is most likely that at least during the initial rehabilitation period external assistance will be required to relieve the pressure.

Policy Issues and Resources Needed

64. On the assumption that the present network is to be rehabilitated and put on a more or less sound footing without in any way increasing the total output capacity, but allowing for redeployment of equipment, I would make the following proposals:

- (a) Studios: the Nakasero news studios should be rehabilitated without delay so that all five are operational. At Broadcasting House the listening booths should be equipped so that producers can check programmes, and an electronic workshop should be set up.
- (b) Outside Broadcast Unit: spare parts should be acquired and a phased replacement schedule for obsolete equipment put in motion.
- (c) Radio repeater stations: the destroyed stations - like Magajo, Mbarara and Dokolo - should be reconstructed as soon as possible. A replacement schedule for the obsolete stations should be worked out and executed uniformly within two years.
- (d) Naguru Central receiving and monitoring stations: the remaining building should be completed as soon as possible and the receiver system rehabilitated.
- (e) Medium Wave Transmitting stations: spare parts for these should be acquired, and the transmitters refurbished, starting with Kibira Road and Kabale. This programme should be consistent with that of rehabilitating the repeater stations. Mbale should be replaced during 1980.
- (f) Short Wave Transmitting stations: the second Bugolobi transmitter should be replaced during 1980. Existing contractual obligations at Soroti should be honoured as they fall due, but the system should not be expanded.
- (g) Vehicles: a limited number should be purchased for outside broadcast and engineering use.

65. The programme proposed above is expected to cost about Shs. 13m. during 1979/80, and Shs. 22m. during 1980/81. Approximately 80% of these values will be in foreign exchange.

66. Other matters of a policy nature have been brought up during discussions. These include the increase in the number of short wave channels, a more flexible system of providing programme material to the up-country transmitters, re-establishment of an educational broadcast system, the provision of cheap radios (and batteries) to the masses.

67. My reactions to these suggestions are as follows.

- (a) Provided financial resources additional to those committed to the above rehabilitation plan are available, a third SW channel would be most useful for educational broadcasts, the commercial unit and special programmes. Such a channel might cost in the order of Shs. 8m., but given the added advantages that would accrue from it, I would strongly recommend its establishment.
- (b) Allowing the regional transmitting stations to originate their programme material (effectively, local radio) is a matter of high political policy. Economic and operational considerations demand studios and extra manpower at each station.
- (c) Schools broadcasting should be re-established; there is a public outcry for it.
- (d) Local assembly factories for transistor radios at Kampala and Jinja should be revived. If necessary an initial large import of radios may be entertained while the local plant 'warms up'.

- (e) The battery (dry cell) factory at Kampala manufacturing under license from Union Carbide should be revived, and a stricter control on quality exercised.

The Contribution of External Assistance

68. Practically all Radio Uganda's income comes direct from the Government (the commercial section's revenue is still relatively small). Extra financial assistance may be available in the form of soft loans organised bilaterally with say UK, Japan, France etc. Multilateral aid could also be forthcoming from the EEC, UNDP/ITU/IBU and IBRD.

69. It would be extremely useful if technician and engineering staff could be given an opportunity to go and work in the factories and radio stations in those countries where the equipment that they maintain originates. In addition manpower assistance through, say, ITU would be most welcome.

(b) TELEVISION

Background

70. Uganda started a black and white TV service in 1965 operating at vhf with 625 lines. It falls directly under the Ministry of Information and National Guidance. There is only one programme channel that is fed to several transmitters around the country.

71. A colour service (System PAL/B) was started in July 1975. It was estimated in August 1977 that there were 80,000 black and white sets, and 1,000 colour sets with an estimated average number of eight viewers per set (compare this to radio sets in para. 46).

72. Live programmes from other countries may be received and retransmitted either via the earth station in Kenya and then by microwave to Kampala or via Arua earth satellite station, and by domestic satellite to Kololo.

Roots of Current Problems

73. On the whole, this has been in the form of looting of tools, spare parts, measuring equipment, vehicles and furniture and fittings. In addition, however, Mbarara transmitting station was totally destroyed, as was the brand new equipment (yet un-commissioned) at Masaka. Annex 20.5 gives more details. As for Radio Uganda, there has been a gradual but steady decline in the quality of equipment, and inavailability of other vital equipment.

Activity during the period 1970-79:

74. Uganda Television (UTV) and Radio Uganda report to the same directors (e.g. of engineering, of broadcasting, etc.), and their activities and problems are very similar in nature.

75. The only major advance has been the introduction of colour television in 1975.

76. It is a miracle that UTV has managed to stay on the air despite extremely inadequate facilities; this point will come out in detail when the rehabilitation plan is discussed later in the paper.

77. The external influences are exactly analogous to those for Radio Uganda and are not repeated here.

The Reconstruction Task Ahead

78. Since, apart from the Mbarara and Masaka transmitting stations, there was relatively little damage to the TV network, the immediate general pre-war picture would

be a useful starting point for formulating a rehabilitation programme that is basically aimed at rectifying the deterioration and neglect of the last eight years; this picture is given in Annex 20.6. It should be noted that of the 10 transmitting stations, Gulu has been off the air for some time as a result of Lira (the link) being off.

79. As stated in paragraph 3 it is my opinion that the rehabilitation of the radio network should take preference over TV. However, if the political decision is taken to continue the TV service in Uganda, the public would expect an acceptable network without necessarily an increase in the basic area of coverage (which is now very approximately 35% of Uganda's land surface with an average population density of about 250 persons/square mile). The financial implications of such a decision must be carefully examined: the various spare parts and equipment needed, including viewers' sets, are expensive, and practically the total cost will be in foreign exchange.

80. The second major constraint on achieving a reasonable network is manpower. Although actual figures were not forthcoming during our discussions, the question of shortage of manpower continually cropped up. A step will have to be taken towards the solution of this problem.

81. Finally there is the transportation obstacle which is very real both for the engineering staff of the various stations, and the many people and the equipment involved in outside broadcast (OB) programmes. OB unit programmes have taken on an increasingly important role because of the feverish activity in the field coupled with a severe shortage in the number of studios.

Policy Issues and Resources Needed

82. The TV service is at a crossroads. Government has two options available to it; to close down the service completely, or to continue it but with certain minimum internationally accepted technical and operational standards. If the service is retained, the following schedule (expected to cost Shs. 21m. in 1979/80 and Shs. 23m. in 1980/81 with 90% in foreign exchange) would be proposed.

83. Firstly, the destroyed transmitters at Masaka and Mbarara should be replaced, and the Lira one replaced and put back on the air.

84. Secondly, the studio equipment should be repaired/replaced (including the lighting system) and supplementary equipment purchased. It is difficult to believe, but true nevertheless, that UTV has only one colour VTR, one telecine and one non-working obsolete colour camera. It is imperative that two additional colour VTRs and telecines, and six colour cameras complete with accessories, as well as several tens of microphones, should be acquired as soon as possible. The inter- and intra-studio communication system (control room/cameramen/machines) is also badly in need of repair/replacement.

85. Third, we must address ourselves to the transmitter station network. One fact suddenly hits us; the relay stations are the weak links in the chain. For the most part these are located in the middle of nowhere, and are basically unattended. Faults occur frequently, e.g. power failure on long UEB lines etc. We should agree that as a matter of policy these relays should be regarded as serving a basically standby function and that off-air-linkage, for the moment at least, should be preferred. Of course one is always looking forward to the days when the UPT microwave network will be used for carrying TV programmes. Meantime, we must appreciate the logical consequences of our decision; the picture quality will be slightly inferior, we will need more powerful transmitters all round, and keeping the Kampala transmitter on the air becomes critical. The last two are advantageous, while the first is not. The plan now is that the replacement units for Masaka and Mbarara should be 5KW each, Mbale should be brought up to 5KW also (it is a key link) and the Lira replacement should be at 10KW. Also, Kampala in view of its key role now should be assigned a second transmitter of say 15KW.

86. Fourth, the central stores should be re-equipped with spare parts for general and specific equipment, and the various repair workshops should be provided with tool boxes and measuring equipment.

87. Fifth, it should be ensured that each transmitter has two high grade off-air

receivers. Proposals to re-deploy the following equipment - received but not yet installed - should be carefully examined with a view to minimising new commitments.

- (a) Masindi (Ch.11) 0.5KW Transmitter
- (b) Hoima (Ch.9) 0.5KW "
- (c) Fort Portal 0.5KW "
- (d) Arua (extra) 0.5KW "
- (e) Kasese 5W "
- (f) Tororo 5W "
- (g) Moroto 5W "
- (h) Biko relay station equipment
- (i) Kabuga (Mbale) relay station equipment
- (j) Erusi East relay station equipment

88. Sixth, is the question of transport. It is reasonable to entertain a request for one landrover per transmitting station. In addition the outside broadcast unit deserves special attention; two vehicles per OB van and a mobile silenced generator of say 10kVA would be reasonable.

The Contribution of External Assistance

89. Financial assistance will certainly be required. One could approach multi-lateral sources such as UNDP, EEC, IBRD and EEC. Most of the existing equipment has been bought from West Germany, UK, Japan and USA: these countries may be willing to assist us bilaterally.

90. Technical assistance is also desperately needed. Both engineers and technicians should undergo formal courses on the PAL/B colour system, and then receive follow-up training on the job. It would be most fruitful if other TV networks - e.g. the BBC - could assist in this training exercise by receiving Ugandan engineers and technicians in their organisation, and also second experienced personnel to UTV. Other technical aid agencies should also be approached.

3. AIR NAVIGATION SERVICES

Background

91. The Directorate of Civil Aviation (DCA) is under the Ministry of Power and Communications, and although its headquarters are at Kampala its operational staff are basically stationed at Entebbe and Soroti (E.A. Flying School).

92. Originally it was part of the East African DCA, but when the community collapsed in July 1977 it had to become an entity on its own, albeit with strong dependence on the Kenya DCA.

Roots of Current Problems

93. There was extensive damage to wiring and equipment at the control tower complex which affected especially the communication equipment (hf and vhf).

94. Stores for spart part holdings for all the equipment were badly looted and practically wiped out.

95. Office equipment and furniture estimated at a replacement cost of Shs. 0.3m. was stolen. There was also a loss of vehicles.

Activity during the period 1970-79:

96. Starting at about the time of the declaration of the economic war, equipment

and plant began to deteriorate because of lack of spare parts, and the unavailability of qualified professional engineering and technician staff.

97. This deterioration manifested itself at the most embarrassing moments; standby power supplies failed to start up when the mains went off, vital equipment would break down when controllers were communicating with aircraft etc.

98. The situation was so desperate that DCA officials feared that ICAO would clamp down on them anytime.

99. During this period the Uganda Government declared its intention to set up an international airport at Arua. Thus in 1973/74 DCA bought the relevant equipment, which arrived in 1975 and has been stored in Jinja ever since; the new airport project never saw the light. Immediate consideration should be given to the modification of this equipment for use at Entebbe where necessary.

External Influences:

100. When the E.A. Community, and hence the DCA broke up, there was friction between the former partner states. At a meeting between Kenya, Uganda and Tanzania, co-ordinated by ICAO Cairo, it was decided that each state would set up its own flight information region (FIR). Kenya already had one, and Tanzania commissioned its FIR in December 1978. The purpose of the Uganda FIR was to:

- control all aircraft flying in Ugandan airspace;
- provide search and rescue services;
- establish communication channels with the neighbouring countries.

101. This was presumably a political decision because Nairobi's FIR was able to continue covering most of Uganda. Indeed as events have turned out it has continued to do so at an annual charge of Shs. 7m. in convertible currency.

102. The break-up of the DCA made it difficult for Entebbe to continue receiving Airworthiness Services which were formally provided under contract between the E.A. Community and the British Civil Aviation Authority. Uganda decided to hire the services of Egyptian surveyors at an annual cost of about Shs. 9m.

The Reconstruction Task Ahead

103. Annex 20.7 gives the DCA equipment position in 1970 and 1979. The picture is very clear when one reads the remarks column; everything seems to be giving trouble, nothing seems to work. Many pieces of equipment are old and obsolete. Some of the more recent equipment which is nevertheless giving trouble was manufactured by firms whose competence in the field of navigational aid equipment is dubious to say the least; apparently there is collaborating evidence from even the newer airports in East Africa.

104. There can be no dispute that something must be done immediately to pull DCA out of its most embarrassing position. Even if Uganda continues to use Nairobi's FIR, there must be certain minimum acceptable air navigation facilities at Entebbe, otherwise airlines will not risk their planes and contents. The consequences of Entebbe being 'blacklisted' will reverberate all through the economy.

105. There are obstacles and constraints with which we must come to terms in this reconstruction period. First and foremost there is finance; whichever path we take to rehabilitate DCA a considerable outlay of money, basically in foreign exchange, will be required.

106. The manpower problem is acute, especially taking into account the fact that Entebbe must operate 24 hours each day. Every section seems to be in trouble; engineering, airworthiness, operations and licensing, and air traffic control.

Policy Issues and Resources Needed

107. Before the liberation war intensified, DCA had tendered for a FIR and additional

navigation aids. The tenders were adjudicated and Thomson CSF would have been awarded the contract (in the sum of US\$15m.) if circumstances had not changed.

The essential components of the FIR for Uganda are the establishment of:

- (a) HF radio circuits (main and standby) RTTY between Entebbe and Kinshasa, Khartoum, Kigali and RTTY/LTTY from Entebbe to Dar-es-Salaam and Nairobi, all these complete with receive and transmit antenna systems and microwave link and terminal equipment. Circuits are also provided to link Entebbe to other Uganda airports.
- (b) a message switching centre for the AFTN.
- (c) the HF voice (mobile and fixed) equipment to link with the neighbouring FIRs and other Uganda airports.

The cost of the above equipment, including installation, commissioning, training and spares for two years of normal operation is estimated at Shs. 50m.

108. Other air navigational aids which were considered in the Thomson CSF quotation, but are external to a FIR set up, were:

- (a) ILS - one off for Entebbe
- (b) VOR/DME - three off for Kasese, Moroto and Kabale
- (c) Primary and Secondary Approach radar for Entebbe

The items (a) and (b) were quoted at Shs. 16m., and item (c) at Shs. 37m.

109. The decision whether or not to acquire FIR (at Shs. 50m.) is partly political, partly economic and partly operational: political because it raises questions of national security and territorial integrity; economic because the project is expensive (and manufacturer's credit is heavy to service) but may on the other hand stimulate more air traffic to Entebbe; operational because it is alleged that Nairobi does not cover all of Uganda's territory on vhf.

110. Assuming that the FIR gets the green light, then in addition to the finance for it, foreign exchange will be needed to repair as well as possible the equipment I have shown to be excluded from the FIR equipment. Otherwise an attempt must be made to repair/replace the equipment at Entebbe and renegotiate the agreement with the Nairobi FIR. Whichever of the above two ways is taken, it will be necessary to rehabilitate the office furniture and fittings, and also to provide for some vehicles.

111. The major resources required will be money, a very large percentage of which will be in foreign exchange, and expatriate staff coupled with overseas and on-the-job training fellowships.

The Contribution of External Assistance

112. It would be extremely useful if ICAO could be persuaded to send expert help for about one month to crystallise the problems facing DCA and to give it a sense of direction.

113. The British Government could also assist through the British Civil Aviation Authority, in both material or financial terms and also in manpower which is desperately needed. Other sources of assistance could be UNDP, EEC and the French Government.

Uganda Airlines

114. This company is covered in the civil aviation paper. The purpose of this paragraph is to draw attention to the fact that the communication system within Uganda Airlines needs attention. It also seems desirable for it to join the SITA network for

inter-airline message communication if it intends to go really international.

4. METEOROLOGICAL SERVICES

Background

115. The Meteorological Department falls under the Ministry of Power and Communications.

Its main functions can be listed under the following headings:

- (a) Air Transport - reports on the weather at Entebbe and Soroti must be given to the Control Tower every half-hour.
- (b) Agriculture - data of use in agriculture is collected, e.g. rainfall, air and soil temperature, sunshine, humidity, etc. and statistical records compiled.
- (c) Weather forecasts - useful for lake transport and generally.

It is because of its importance for air travel that it has been included as part of this paper.

Roots of Current Problems

War Damage:

116. Although full details are not available yet - especially from outstations, it is believed that most meteorological instruments, equipment in instrument workshops, and office furniture at the eleven observatories were either looted or damaged.

Activity during the period 1970-79:

117. At the beginning of this period, Uganda was a mere region of the East African Meteorological Department whose headquarters was at Nairobi. Uganda, therefore, depended very heavily on Nairobi both for equipment and professional and technical staff; this was undesirable.

118. After the break-up of the East African Community, Uganda discovered that it had a severe manpower shortage. In addition the equipment had become unserviceable due to lack of spares which could not be purchased for lack of foreign exchange. Planned replacement of obsolete equipment also never materialised.

119. Work had come to a practical standstill, but this did not seem to worry the Government, maybe because the Department earns no money.

External Influences:

120. When the EAC broke up, Uganda had to set up an independent meteorological service because most of the professional and technical staff, the telecommunications and major meteorological equipment, as well as the workshops, were stationed in Nairobi.

121. Uganda was ill prepared for this new service; this led to the problem already outlined above.

The Reconstruction Task Ahead

123. A picture of the Department as at 1970 and as at 1979 is given at Annex 20.8.

124. The most urgent task now is to survey the following pieces of equipment at Entebbe and determine whether or not they are really unserviceable as reported to us. Unserviceable units should be replaced urgently.

- (a) Weather radar
- (b) Weather satellite ground station
- (c) HF communications receivers
- (d) SSB transceivers (radiotelephones)
- (e) Hydrogen generator
- (f) Upper air station

125. In respect of item (b) it should be confirmed or otherwise that the ground station is incapable, even when repaired, of receiving signals from a geostationary satellite.

126. Secondly, and also very urgent, all the 11 observatory stations should be re-equipped as soon as possible; their requirements are modest, but their output data is extremely valuable. It should be ensured that they have working radiotelephones to enable them to report once every three hours.

127. Thirdly, it is vital that the Entebbe observatory be in radio or line communication with the control tower so that up to the minute information may be passed on to pilots landing or taking off.

Policy Issues and Resources Needed

128. While it would obviously be desirable to set up a National Meteorological Centre, I am unable to recommend it during this rehabilitation period. We should focus all our efforts onto seeing that the Entebbe Meteorological Station is functional and well equipped to serve civil aviation needs, and that the various observatory stations around the country are working properly.

129. The needs of Soroti as a Regional Flying School should receive a sympathetic hearing for the same reasons as mentioned in the last paragraph.

130. Uganda should continue to receive weather messages and aeronautical forecasts from the Nairobi Regional Telecommunications Hub (RTH) for Africa.

131. Computer time should be hired from already existing centres in Uganda for batch processing of meteorological data.

132. A sound building construction programme both for stations and offices, as well as for staff housing is a vital pre-requisite for the task ahead. It is hoped that the building industry in the country will be able to accommodate this construction programme as well as many others which will be making demands on it.

133. As the service gradually recovers and confidence is restored, expansion should be based fundamentally on the throughput, i.e. flight documentations and the various enquiries handled. On the basis of performance, the project to set up a National Meteorological Centre should be reconsidered in June 1981.

External Assistance

134. The task of setting up a meteorological service from virtually nothing will require a great deal of new equipment and spares. All these will have to be imported. Government will find it difficult to raise both the local and foreign exchange inputs for this service industry.

135. Various aid agencies may therefore be approached and invited to share in the funding of this rehabilitation exercise. Loans that require servicing may be inadvisable for this 'non-productive' enterprise.

136. Clearly the Department will have to be expanded and upgraded. This means that extra staff (managerial, professional, technician and general) will have to be recruited. Expatriate personnel should be employed while the Department plans and executes a staff development programme geared to the task ahead.

137. In addition to the usual technical assistance channels, it is likely that the World Meteorological Organisation (WMO) and the International Civil Aviation Organisation (ICAO) will be willing to assist.

1979 War Damage to Uganda Posts and Telecommunications

Item	Location	Extent of Damage
Subscriber installation	Overall	70%
	Masaka	100%
	Mbarara	100%
Kampala network (exclude U/G cable)	Kampala	60% (?)
Exchange and their buildings	Masaka	100%
	Mbarara	"
	Lira	"
	Mityana	"
	Mpigi	"
	Kyotera	"
	Kalisizo	"
	Nabusanke	"
Maintenance workshop (include tools, equipment and stores)	All	60% (?)
Radio link stations	Sabwe (Mpigi)	60%
	Masaka	60%
	Mbarara	60%
Records (Accounts, Post Offices and Savings Banks)	Overall	40% (?)
Junction Cable and major o/h route	Overall	60%
	Kampala/Entebbe	80%
	Kampala/Bombo	80%
Vehicle Fleet	Overall	80%

Telecommunications Major Equipment, Services, Manpower and
other facilities

Facility	By 1970	By 1979
Automatic exchanges	13	20
Manual exchanges	32	93
Electricity generating sets	8	37
Underground cable	na	na
Radio Routes		
Kampala - Masaka	48 ch.	48 ch.
Kampala - Jinja - Nairobi	-	960
Jinja - Mbale	-	60
Kampala - Gulu	12	12
Kampala - Arua	3	15
Kampala - Arua (DOMSAT)	-	24
Kampala - Masindi	6	12
Kampala - Fort Portal	-	24
Kampala - Mwanza (Troposcatter)	48	48
Kampala - Kigali (UHF)	1	1
Single Channel Routes (UHF)	3	23
Arua - London (SATELLITE)	-	6
Telephone Physical Connections	26,785	52,186
Radio Bearer Trunks	na	na
Kampala Camier Room Trunk Test Board	1	1
Telecommunications Manpower		
Professional	9	22
Semi-professional	80	117
Technical	89	729

1979 War Damage to Radio Uganda

Facility	Location	Extent of Damage
Studios	Broadcasting House	10%
	Nakasero News Studios	10%
Workshops	Kampala	Looted
Outside Broadcasting and Mobile Recording Unit	Broadcasting House	?
Transmitting stations	Kabira Road (50+10 KW)	10%
	Bugolobi (SW + MW)	10%
	Mawagga (2x50 KW, MW)	Looting of tools, measuring equipment, furniture, vehicles
	Kabale (2x50 KW, MW)	"
	Soroti (2x250 KW, SW)	"
	Butebo (2x50 KW, MW)	"
	Bobo (2x50 KW, MW)	No report, but is off air
	Arua (Gilgil)	"
	Mbale	Long off the air
	Magejo	Totally destroyed
	Mbarara	"
	Dokolo	"
Link stations	Nakisajja	Equipment and tools looted
	Kisunji	No damage
	Omoru	No report
	Rwagazu	"
	Soroti and Butebo	Looted
	Fort Portal	No report
	Jinja	"
	Mbale	"
Teleprinter network (news)	Gulu	
Naguru Central Receiving and monitoring station	Naguru	

Major Equipment, Services, Manpower and other Facilities

Facility	By 1970	By 1979
Nakasero studios (News)	1	5
Broadcasting house studios	13	20
Transmitting stations (SW)	1	2
Transmitting stations (MW)	na	9
Link station	9	9
Teleprinter Network station	2	5
Naguru Monitoring stations	1	1
Manpower		
Professional	na	na
Semi-professional	na	na
Technical	na	na

1979 War Damage to Uganda Television

Facility	Location	Extent of Damage
Studios (2 only)	Nakasero	Nil
Outside Broadcast Units	Mobile	Nil
Transmitting stations (VHF)	Kampala (Ch.5)	Nil
	Kabale (Ch.7)	Looted
	Mbarara (Ch.10)	Totally destroyed
	Jinja (Ch.11)	Looted of tools & small equipment
	Mbale (Ch.8)	"
	Soroti (Ch.10)	"
	Lira (Ch.7)	"
	Gulu (Ch.9)	"
	Arua (Ch.6)	"
	Masaka (Ch.8)	Totally destroyed
	Nkirakira	No report
Relay stations	Masaka	"
	Nakisajja	"
	Jinja	"
	Kagulu	"
	Ongora	"

TV: Major Equipment, Services, Manpower and
Other Facilities

Facility	By 1970	By 1979
Studios	2	2
Colour VTR machine	Nil	1
Telecine	na	1
Colour cameras	Nil	Nil
Black and White cameras	na	7
Transmitting stations	na	10
Relay stations	na	6
Outside Broadcast Units		
Colour	Nil	2
Black and White	na	1
Manpower		
Professional	na	na
Semi-professional	na	na
Technicians	na	na
Others	na	na
Output		
Programme hours per week		
Penetration of service		

Major Equipment, Services, Manpower and other Facilities

Equipment/Services	By 1970	By 1979	Remarks
VHF transmitters (Tower) (Approach)	na	na	Entebbe & Soroti
VHF receivers (Tower) (Approach)	na	na	Entebbe & Soroti
Area cover repeater station	1	1 + 3	The three never commissioned
HF transmitters (CW)	2	2)	Currently unserviceable
HF receivers (CW)	2	2)	
HF transmitter (voice)	1	2)	
HF receiver (voice)	1	2)	
NDB	5	8	Only one OK
VOR/DME	1	1	No standby unreliable
Teleprinters (land line)	na	na	All down and obsolete
Terminal primary radar	na	1	Intermittently faulty
FIR	Nil	Nil	Needed after 1974
VDF	?	2	Both down
ILS	Nil	1	Not commissioned since 1975
Message channels (AFTN)	na	6	
<u>Output</u>			
Aircraft movements	59465	31535	EBB + Soroti
Passenger handled	316800	?	
Freight (Tonnes)	3600	?	
Messages (aircraft + met)	43197	25211	

Meteorological Services Major Equipment, Services, Manpower
and other Facilities

Facility	By 1970	By 1979	Remarks
National Meteorological Centre (NMC)	1	Nil	Was in Nairobi
including the following: Landline terminals linking E.A. Forecast offices automatic RTT receiver			
Tie line between Entebbe Observatory and Control Tower	1	Nil	Badly needed
Entebbe Observatory	1	1	
Weather radar	1	1	Now unserviceable since 1977
Weather satellite ground station	1	1	"
HF communications receivers	2	2	"
SSB transreceivers	5	5	"
Hydrogen generator	1	1	Unrepairable
Observatory out-station/offices	na	11	
Upper air station (radio sonde)	na	1	Unserviceable
Data processing equipment	yes	Nil	Was in Nairobi
<u>Manpower</u>			
WMO Class I Meteorologist	2	10	
" Class II "	10	16	
" Class III "	-	-	
" Class IV "	120	170	
Telecommunication engineers	Nil	1	
Technical staff	12	6	Severely under- staffed
<u>Output</u>			
Observations per day per observatory station	18	na	
Flight documentations per month	200	na	
Public weather forecasts per day	2	na	
Various enquiries per month	200	na	

SOCIAL INFRASTRUCTURE

EDUCATION

1. THE SCHOOLS

Gerry Helleiner

The Uganda System

1. The Uganda school system offers seven years of primary education (P1 to P7), followed by an examination (the Primary Leaving Examination), consisting of three papers, English, Mathematics, and General. About 47% of the primary school age population are in government-aided schools, and a further 20 to 25% are in private ones, many of which are unlicensed and of dubious quality. In 1978, the intake of students into the first year of government-aided private schooling totalled 58% of the estimated eligible population. Drop out rates are not unreasonably high except for females who make up 45% of the students in P 1 and only 32% of those in P 7.

2. A quarter of those completing seven years of primary schools are accepted into post-primary education institutions, and only 15% into government-aided schools. Most of those in government schools enter secondary schools for four years of education (S1 to S4) to 'O' level (East African Certificate of Education). A small portion enter either technical schools where they learn trades such as carpentry, block-laying, tailoring, etc. for three years, or teacher training colleges (grade II) for four years. Many of the private secondary schools have not met the minimum requirements for formal registration, and many provide less than a full four-year course of study. The small proportion of primary school leavers who can be accommodated at the secondary level leads to frequent repetition at the P7 level in order to improve performance in the competitive examination at the end (roughly 40% of P7 enrolment).

3. Approximately 40% of those completing 'O' level secondary education continue into further education. About half of those who continue take two more years of secondary education, culminating in the 'A' level examination. Of the remainder, the majority enter various departmental training institutions which are not in the Education Ministry's field of responsibility (mainly in health and agriculture). Next in importance are the entrants to teacher training colleges (Grade III). The rest enter technical institutes (two years) or apprenticeship training.

4. Modest school fees are paid both at primary and secondary levels in government schools. There are further costs of books, uniforms, etc. These undoubtedly constitute a significant disincentive to enrolment for the poorest.

5. The curriculum, teaching and other practices at both the primary and secondary levels seem to exhibit the usual deficiencies: inadequate schooling in science and technical fields, overconcentration upon the needs of those seeking to advance to higher levels of the school system, overemphasis upon final examinations, under-utilisation of capacity, etc.

6. With the exception of Karamoja (for which special grants have been provided), the distribution of primary schooling around the country is reasonably well balanced (see Table 21.1); the enrolment ratio in each of the old provinces is within 15% of the national average. The availability of secondary education, however, is much more skewed, with Central Province taking a disproportionate share both of the total number of students and the total number of school places.

7. Outside the formal system, there is a variety of training programmes for youth and for adults run by government departments (e.g. district farm institutes) or by voluntary organisations (YMCA, Scouts, etc.). There is also the Uganda Broadcasting Corporation's radio (and, to a much less important extent, TV) programming.

Table 21.1

Proportions of Children Enrolled in Government-Aided Schools by Province., 1977

(National Average = 100)

<u>Province</u>	<u>Primary</u>	<u>Secondary</u> ¹	
		<u>Pupils</u>	<u>Places</u>
Nile	110	71	97
Northern	115	101	112
Karamoja	35	45	16
Eastern	109	99	122
Busoga	106	115	83
Central	106	267	150
N. Buganda	95	51	54
S. Buganda	89	98	93
Western	100	78	100
Southern	90	74	108

Notes 1 'Pupils' refers to the home province of the pupils.
 'Places' refers to the number of students at school in the
 province regardless of their home province

Source: Commonwealth Team calculation

The Roots of Current Problems

8. The school system suffered, just as did other sectors, from the effects of the economic war and the years of declining real budgets, lack of maintenance, and neglect which followed. The departure of the Asians affected secondary level education, and particularly that in mathematics and physics, most severely. Less qualified and inexperienced Ugandans and, in some cases, newly recruited Asians have done their best, but the quality of this part of secondary education has suffered. This is said to be evident in the results in recent 'A' level examinations in which Uganda candidates' performance deteriorated noticeably relative to that of Kenyan candidates. Teacher morale and productivity have also suffered as real incomes fell, individual teachers were harassed, and alternative opportunities for income-earning became increasingly attractive. Teaching supplies and equipment are badly depleted at all levels in consequence of the cessation of book imports, dwindling availability of paper, and the like. In the case of secondary level science teaching, laboratories have often been unusable.

9. The deterioration in the Ugandan school system over the past eight years is primarily a matter of quality rather than quantity. As can be seen in Table 21.2, while there was a slight deterioration in the pupil-teacher ratio (33.5 to 36.5 at the primary level), and a decline in the proportion of primary school leavers for whom there were places in post-primary educational institutions (25.2% to 23%), the intake into the primary schools actually rose steadily from 46% of the relevant population in 1970 to 58% in 1977, and the pupil-teacher ratio at the secondary level has recently been improving.

Table 21.2

Educational Statistics, 1970-1977

	1970	1977
A. <u>Primary</u>		
Intake into government schools as % of relevant population	46	58
Enrolment in government P1 to P5 as % of relevant school age population (6-10 years)	43.3	50.4
Enrolment in P1 to P7 as % of relevant school-age population (6-12 years)		47
- Government schools		20-25
- Private schools		67-72
Total		36.5 (1978)
Pupil-teacher ratio in government schools 33.2		
B. <u>Secondary</u>	<u>1970</u>	<u>1977</u>
Intake into all post-primary education as % of P7 examination candidates	25.2(1972-3)	23.0
Pupil-teacher ratio in government secondary schools	24.0(1974)	22.0

Source: Ministry of Education

10. Complete reports on the damage suffered by schools in the recent war and related looting are not yet available. Preliminary assessments suggest that there have been widespread losses from the looting of furniture, radios and TV sets, exercise and text books, laboratory chemicals, tools and vehicles. Damage to school buildings and property is also assumed to be extensive.

The Task Ahead

11. In the field of education, a return to the previous standards (though not necessarily the content) of the school system, while preserving the purely quantitative gains in enrolment, can be the objective of the rehabilitation programme. At the same time, the opportunity of improving the basic structure of the system should be seized. An Education Policy Review Commission reported in December 1978 on the deficiencies of curriculum and other matters, and recommended, among other things, moves towards more universal and practical education, more efficient use of existing facilities, and greater resort to correspondence and non-formal schooling. Any rehabilitation strategy should take its findings and recommendations into account.

12. The priority requirements for a rehabilitation of the schools are:

- school supplies
- the re-equipment of looted schools; and
- particular, identifiable types of teachers for the secondary and technical schools and institutes

The Ministry of Education kindly supplied us with a first assessment of its needs, on which much of our own assessment is based.

13. School supplies can be made available in large part through official or other development assistance. The Ministry knows fairly precisely where the books and other supplies they require are obtained, and can present potential donor governments with detailed 'shopping lists' (complete with book titles and numbers needed) at short notice.

14. Some economies might be effected in the re-equipment of schools with furniture through calls upon local communities, domestic purchasing, and a degree of improvisation. An early priority, however, should be the provision of radios to all schools so that advantage can be taken of high-quality educational programmes again. About 3,000 of them are estimated to be needed. The Ministry's estimate of Shs. 500 m. as the total cost of carrying out repairs and replacing damaged buildings (including their furniture and equipment) can at this point be regarded as no more than a rough guess.

15. The Ministry's assessment of its priority manpower requirements from abroad related primarily to the decline in 'A' level standards in mathematics and some of the sciences. It would like to recruit from abroad, for each of the 50 secondary schools offering 'A' level instruction, two fully qualified mathematics teachers and one similarly qualified physics teacher; 20 'A' level chemistry teachers and 13 teachers for 'A' level technical, business and home economics subjects at selected schools, are also sought. Apart from this order for 183 'A' level teachers, they seek 11 expatriates to teach various technical subjects (tailoring, leatherwork, plumbing, agricultural engineering) in technical schools and institutes; and 2 teachers for the training of 'O' level teachers of technical education at the National Teachers' College. While there is an undoubted need to upgrade the quality of mathematics and science instruction at the secondary level, this 'manpower bill' seems rather crudely constructed and overly weighted in favour of 'A' level education (provided to roughly 2.5% of the population of the relevant age). It will be necessary to improve the quality of mathematics and science instruction throughout the secondary system if a lasting impact is to be made by an injection of expatriate teachers.

16. We would assign high priority to the immediate re-equipment of the schools with basic educational supplies and to the repair of damaged buildings. A more phased and careful approach to the reconstruction of the overall school system, which takes into account the broader objectives of educational policy, and the possible return of overseas Ugandans would seem for the present to be appropriate in respect of manpower requirements.

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2. THE UNIVERSITY OF MAKERERE

Dudley Seers

Roots of Current Problems

17. The University was comparatively undamaged in the recent war and looting. Some members of Amin's army forced the main gates in an attempt to take refuge there; some bombs fell on the campus - the windows and outside structure of a few buildings were damaged, and some University houses off campus were also damaged and/or looted. The total damage to University property has been estimated at Shs.13 m. by the University Engineer. The main loss was an exodus of academics, especially expatriates, aggravating an already serious staff problem.

18. 1970 was perhaps the peak year for Makerere. By then it had built a leading reputation among African universities. The first university established in East Africa, it had helped its younger sisters in Nairobi and Dar-es-Salaam and had educated a high proportion of the academic staff teaching there and also of civil servants and political leaders throughout East and Central Africa. This was the year it became fully independent, a university in the full sense with a range of faculties from Medicine and the Sciences to Law and Arts. Nearly 3,000 students were enrolled and it had a faculty of over 300, many with an international reputation, giving a satisfactory overall average student-staff ratio of under nine. Graduate studies had already started, research was flourishing. The Makerere Institute of Social Research was world famous and the University pioneered the way in trying to make teaching in the social sciences relevant to African problems.

19. In the past nine years, however, the University has lost much manpower, especially at the higher levels, due to the personal insecurity felt by many academics, and the increasingly unattractive salary levels (especially in relation to prices of consumer goods) by international standards. Many sent abroad on the Staff Development Programme never returned.

20. To offset its losses it recruited staff abroad, from South Asia and the Arab world, offering expatriates salary levels rather more than 50% above local rates. Apart from its own funds, it had in that period access to two main sources of technical assistance, UNDP and the Arab League (the latter covering most of the staff from Arab countries). However, while the number of established posts rose to 617 for 1978/79, the actual number in post in March 1979 was, at 317 (two-thirds expatriates), only about the same as in 1970, although in the meantime the number of students had increased by nearly 50%. The overall average staff-student ratio of over 12 disguised serious shortages in some faculties, notably Agriculture and Veterinary Medicine.

21. Moreover, there seems to have been some deterioration in quality of teaching, especially if apparent linguistic difficulties are taken into account. In areas such as social sciences, certain subjects were dangerous to discuss, and teaching became of limited relevance to Uganda's needs. Research has virtually ceased.

22. Equipment has also deteriorated. There has been very little construction. Indeed, no building on campus has been completed in this period, even projects started in the 1970-73 triennium. Some faculties have become seriously overcrowded. There is also a growing shortage of living accommodation for both teachers and students, and the University has been accommodating staff in hotels (at a total cost of Shs 185 thousand a month). In student halls of residence, sanitary and cooking facilities have deteriorated and overcrowding increased, to a point where they would be closed by Kampala City Council if they were in the private sector. (Lumumba Hall has no toilets operating at all, the whole drainage system being blocked.)

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1 Based on information supplied by the Vice-Chancellor and Academic Registrar and comments by Dr. Kigundu. I was fortunate, moreover, to be able to compare notes with Dr. Bevan and Mr. Theakstone of the Inter-University Council, and Dr. Niesel of the German Agency DAAD, who were visiting Makerere.

23. Teaching materials and aids have also become scarce, chemicals and other scientific supplies virtually unavailable. Purchases of books and periodicals have sharply declined (whereas the University once subscribed to more than 2,000 periodicals, it now receives only 360), and there are serious gaps in the University's collection of books published in the 1970s. There are also few vehicles left for fieldwork, though these are especially necessary for faculties such as Agriculture and Forestry. Academic staff have rarely been able to travel to conferences with colleagues overseas.

24. At the root of these physical problems has been the growing inadequacy of financial appropriations and foreign exchange supplies. The approved block grant has been declining in real terms and, since 1973, the University has in any case been receiving a declining share of what was due; in effect, the triennial system has been abandoned and the appropriation has been negotiated yearly. The consequences are brought out by the following table.

Table 21.3

Univeristy Revenue and Foreign Exchange Allocations: 1973/74-1978/79¹ (Shs. m.)

	Recurrent grant approved by Government on triennial plan	Grant Actually Received	Foreign Exchange Allocation
1973/74	53	50	1
1974/75	55	43	-
1975/76	58	43	9
1976/77	73	54	4
1977/78	95	63	8
1978/79	100	78	2

1 In 1970/71 the grant, both approved and received, was Shs. 33m.

Source: Submission of the Vice-Chancellor to the President, 1979

25. The rise in the receipts of 56% since 1973/74 was much less than the rate of price inflation. The University puts its foreign exchange needs (including the savings of expatriates) at about 25% of its total expenditure, i.e. at Shs. 19 m. for 1978/79. The actual provision has been meagre and uncertain, especially affecting the library.

26. In the circumstances, the University's survival has been remarkable. External examiners continued to be employed (though from different countries than formerly) and pass rates remained high in most degrees (except B.Sc.) up to 1976/77, the last year for which results are tabulated. However, that was too early to reflect the education being received in the really bad and worsening period from 1975 to 1979, and a small question mark arises over the professional capacity of recent graduates, at all events in some faculties.

The Task Ahead

27. It should be possible to get the University functioning more or less satisfactorily by the start of the academic year 1981/82, though it would be optimistic to expect Makerere to have regained its leading position by that date, especially if (as it hopes) it succeeds in innovating syllabuses appropriate for local needs. The rebuilding of staff and syllabuses, including the replacement of inadequate staff, takes a long time (especially since it is very difficult to dismiss some of the incompetent staff recruited in the recent past). An adequate research programme would take several years to re-establish.

28. For 1979/80, an intake of over 1,400 students is expected, bringing the total enrolment to over 4,200, compared to 3,932 in 1978 (and 2,712 in 1970). This is a big intake, especially in view of the staff situation. Not merely had the actual staff in post fallen to 317 by March; some of those who left during the war (especially the 15 financed by the Arab League) are unlikely to return. Many courses will not be run in the coming year.

29. Heavy capital investment is needed to make good the deficiencies in buildings and equipment outlined above. The University estimates its needs at some Shs.800 m. (see Annex 21.1). Particularly necessary is new accommodation for staff and students to match the expansion in student numbers since 1970. But the projected new University Centre and related facilities would be of a lower priority.

30. A major source of manpower is Ugandan graduates in exile, especially former staff members and those who went abroad on a Staff Development Programme but did not return. There are altogether over 200, more than half in East and Central Africa. The University has in fact sent individual letters to those it can trace. Many, however, have personal reasons for not returning home (career prospects, house mortgages, children's education, etc.) at least for some years. Altogether applications from 120 Ugandans (including those who did not leave the country) are before the Appointments Board.

31. One constraint on recruitment will be travel costs. The shortage of staff accommodation mentioned above will be another obstacle to recruitment. The feasibility of the construction programme depends on the capacity of the building industry in Kampala and on the other demands on it. (See the paper on Housing).

32. Moreover, the salary level at the University is now very low. Thus a Senior Lecturer at the bottom of the scale gets Shs.42,900 (if there are no expatriate allowances), compared to Shs.55,440 in Nairobi, where living costs are lower, and the comparison is even more unfortunate further afield - eg. the equivalent of Shs.95,150 in Ahmadu Bello.

Policies and Resources Needed

33. Although the start of the academic year has been postponed by a month (to 4 August) there is very little time to solve these problems, if teaching of an adequate range and level are to be provided.

34. The quality of a university depends fundamentally on its teaching staff. There are a number of instances of universities thriving despite inadequate buildings, eg. in wartime, but none without adequate academic staff. To operate at all fully, a recruitment of 150 staff members is urgent. The rate and nature of expansion after 1981 needs to be based fundamentally on the country's manpower needs¹ and related to the expansion of secondary schools.² (See the respective papers). If it were possible to reach regional agreements on specialisation, some small faculties might be abandoned, and new faculties planned (in Dentistry, Pharmacy and Nutrition) might not be needed. But the staff in the mid-1980s will not be much smaller than the present establishment, though perhaps with a somewhat different balance.

35. A high policy priority is adequate salaries. The University is requesting the Government to enable it to match Nairobi levels, as was the case in 1970 - i.e., to raise salaries by about 15 - 30%. This seems entirely justified and necessary if Ugandans, especially those now in Nairobi, are to be attracted back.

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- 1 It would be useful in faculties such as Social Science to conduct refresher courses, aimed at those who took their degree in the past few years.
 2. The shortage of science teachers described in the section on School Education is reflected in a shortage of good candidates for science courses at Makerere.

36. The need for staff recruitment implies a priority also for staff housing. However, the University's capital needs would be lower if salaries were raised by enough to enable them to rent or buy private housing (see the paper on housing policy), and this need not imply any increase in recurrent spending, since rents of its houses are heavily subsidised.

37. The tasks outlined above imply very roughly the needs outlined in the following table.

Table 21.4 Finance needed for Rehabilitation

Year	Government Recurrent Grant	Capital Expenditure	Foreign Exchange	Net Academic Staff Recruitment
	(Shs. m)	(Shs. m)	(Shs. m)	
1979/80	150 ¹	150	27 ²	150
1980/81 ³	175	250	25	75
Past 1981 ³	400			50 ⁴

Notes

- 1 Shs 146 m. actually requested from Government not allowing for salary increases as indicated above, or for wage increases which are expected to come to about 30%. On the other hand, the submission apparently assumed that about 500 posts will be filled, which seems optimistic, especially for earlier stages of the academic year. It also assumed an intake of 1,700.
- 2 The University has asked the Government for Shs. 15 m. worth of foreign exchange immediately and Shs. 1 m. a month. These figures, which seem reasonable, do not include the foreign exchange element in capital expenditure
- 3 At 1979/80 prices
- 4 Would bring the number of staff to 575.

38. The expenditure over two years of Shs. 400 m. on capital investment shown in Table 21.4 would allow residential facilities to be built, easing shortages that will increase sharply at the beginning of the next year. This figure would also allow a start to be made on the expansion of teaching facilities as well as the completion of projects already in hand (including the Mechanical Engineering Block and the building for the Faculty of Veterinary Medicine).

Contribution of External Assistance

39. The shortage of teaching and research staff is so acute that an appeal should be made for a special Makerere Emergency Rehabilitation Programme, addressed to academic colleagues abroad, especially in Africa. Most universities are themselves in some financial difficulties nowadays, but they could spare a few staff on a temporary basis, and, if the burden were spread widely, no more than two need be provided from any particular university. Many academics would doubtless offer their services voluntarily, especially those with past Makerere connections. It would be, in particular, a chance for Nairobi and Dar-es-Salaam to repay their professional debt to Makerere.

40. The target for such a programme might be to provide 50 academics for most of two years. This injection should help to re-establish both teaching and research at former standards, though all concerned should be aware that teaching and research priorities need careful tailoring to Ugandan requirements, which are very different indeed from those in donor countries. Otherwise the external contribution could make the task of building appropriate syllabuses more difficult. Short visits to Makerere would also help end the University's isolation.

41. Makerere would no doubt as usual cover local salaries and possible housing for expatriates but overseas agencies would need to cover travel and could 'top up' salaries, such as the BESS scheme which used to be operated by ODM. In order to avoid complicated sharing of finances by various donors, one of them could be asked to meet all such costs, the total of which would not in fact be great. The Inter-University Council, which is financed by ODM, would be a possible administrative agency, capable of organising a rapid response to Makerere's needs (as they did earlier in Nigeria). The IUC is in fact planning to provide five academics in key faculties for the first term of the next year, plus a team of technicians.

42. In addition, other technical assistance channels might be utilised to obtain staff, some on longer contracts. Due to the procedures of these agencies, it would be unreasonable to expect quicker recruitment than say 20 in the course of 1979/80 and 40 in 1980/81.

43. Assistance may also be needed to help cover travel and resettlement costs of returning Ugandans joining the staff. The Ford Foundation has undertaken to pay these for 50 Ugandans abroad, who would be able to teach in Agriculture or Social Sciences (the budgetary allocation of US \$ 200,000 covering families as well). The University's contacts with NUFFIC of the Netherlands, DAAD of Germany and IDRC of Canada should lead to further help of this type, which will also be needed to cover recruitment of expatriates (other than those financed by aid programmes).

44. A revival of the Staff Development Programme for young Ugandans is necessary, especially for those who could not travel in recent years. Short Visiting Fellowships could also be very helpful.

45. Aid agencies might also be requested to cover the foreign exchange element shown in Table 21.5 and the cost of capital investment needs. On these assumptions, we get the following, very approximate, needs for aid.

Table 21.5 Aid Needs

	Technical Assistance	Budgetary Aid 1 (Shs. m)	Capital Aid	Total
1979/80	11	27	150	188
1980/81	13	25	250	288

1 Note that if these costs are carried by aid programmes, the Government grant towards recurrent spending can be reduced correspondingly to Shs 123 m. and Shs 150 m. for 1979/80 and 1980/81 respectively.

46. Further help will be needed with the remainder of the capital programme after 1981. However, the main focus now should be on the need for responding rapidly to the needs for extra staff.

MAKERERE UNIVERSITY - CAPITAL PROJECTS - ESTIMATED COSTS

(JUNE 1979)

A. FACILITIES FOR TEACHING AND RESEARCH

<u>Project</u>	<u>Estimated Scheme Value</u> Shs. m.	<u>Funds Released</u>
<u>Technology</u>		
Mechanical Engineering	8.0	8.0
Civil Engineering	46.0	12.9
Electrical Engineering Block	52.0	-
Road Works	2.0	-
	<u>108.0</u>	<u>20.9</u>
<u>Veterinary Medicine</u>		
Completion of Phase I	50.0	21.0
Veterinary Farm	10.0	-
	<u>60.0</u>	<u>21.0</u>
<u>Institute of Statistics</u>		
Institute Building	<u>36.0</u>	<u>7.2</u>
<u>Agriculture & Forestry</u>		
University Farm, Kabanyolo	12.35	2.0
Field Station	5.00	-
New Department of Food Science	28.00	-
	<u>45.35</u>	<u>2.0</u>
<u>Faculty of Science</u>		
Teaching Block	60.0	-
Science Workshop	1.0	-
Computer Centre	1.0	-
Gas Plant	<u>1.0</u>	<u>0.9</u>
	<u>63.0</u>	<u>0.9</u>
<u>Faculty of Medicine</u>		
Basic Medical Science Building	60.0	-
Clinical Departments Building	80.0	-
	<u>140.0</u>	
<u>Faculty of Education</u>		
Science Laboratories	<u>39.0</u>	-
<u>Faculty of Arts and Social Sciences</u>		
Teaching Block	<u>24.0</u>	-
<u>Centre for Continuing Education</u>	<u>10.0</u>	-
Reconstruction of Teaching Facilities	<u>1.5</u>	-

B. RESIDENTIAL FACILITIES

<u>Project</u>	<u>Estimated Scheme Value</u>	<u>Funds Released</u>
	Shs. m.	
<u>Accommodation for students</u>		
Reconstruction	8.0	-
Rehabilitation	37.5	-
New Residential Halls	73.0	-
	<u>118.5</u>	-
<u>Staff Accommodation</u>		
Reconstruction	2.5	-
250 Senior Staff Housing Units	75.0	-
260 Housing Units for supporting staff	32.5	-
	<u>110.0</u>	

C. FACILITIES FOR CENTRAL SERVICES

New Telephone Exchange	3.6	3.6
University Hospital and X-ray Unit	4.5	2.5
University Guest House	1.2	-
Medical School Library	8.0	-
University Centre	70.0	-
Sports Facilities	2.0	-
Estates Department	4.0	-
	<u>93.3</u>	<u>6.1</u>

SUMMARY OF ESTIMATED CAPITAL COSTS (Less funds already available to the University)

	Shs. m.
Teaching Facilities	471.65
Students and staff accommodation	228.5
Central Service Projects	<u>87.2</u>
TOTAL	<u>787.35</u>

Source: Annex to the submission of the Vice-Chancellor to the President, 1979.

HEALTH SERVICES

V. Kyaruzi and Ruckia Hamisi

Roots of Current Problems

1. This paper gives a general picture of the health services in Uganda including their performance and problems during the past eight years, and assesses manpower and financial needs for immediate rehabilitation. The paper is based on written and verbal information provided by officials of the Ministry of Health and the Medical School of Makerere University, and also on information gathered during visits and discussions with officials of hospitals in Masaka, Mbarara, Kabale and Hojo.

2. As in all emergencies, after the war and widespread looting, Uganda suffered a disruption of communications and displacement of personnel, with the result that the situation prevailing in each part of the country is not definitely known. The telephone system has been disrupted - Entebbe, as mentioned in the Preface, is cut off from Kampala, and the people whose job it would be to assess the situation had their homes destroyed and are not back at work.

3. Looting reported at Kampala, Masaka and Mbarara appears to have been general - beds, blankets, sheets and medicine were taken - offices were stripped of furniture and telephones - files and records were destroyed, books torn or taken away - doors smashed and although the hospitals (at least those visited) were not bombed, the looters blew the safes open and caused structural damage to buildings. All the hospitals which were looted had their stores extensively damaged. So the need to have these stores repaired before new equipment arrives is of top priority.

4. The health services in Uganda are provided through:

Government	46 hospitals	8,112 beds
Missionary	26 hospitals	3,215 beds
Industry	3 hospitals	284 beds
Private	1 hospital	30 beds

In addition there are 102 government health centres, 59 dispensaries and 270 health units run by local authorities.

5. The services have suffered during the last eight years, not because of lack of budget provision, but because of foreign exchange difficulties and the exodus of skilled and experienced doctors. Up to 1975 the Central Medical Stores at Entebbe had no difficulty at all with foreign exchange, as indents were accepted by the Crown Agents on credit. However, from 1975, because of accumulated debts, credit facilities were suspended and all purchases had to be paid by cash. As a result the indents for 1977/78 were never accepted; and for the year 1978/79 no indent was prepared in the absence of any assurance that the necessary foreign exchange would be forthcoming.

6. As a result of the declining standard in health services various diseases have become prevalent. Whereas in 1970 malaria was the number one disease, this is now second to measles. Skin diseases, respiratory diseases, rabies, sleeping sickness and infectious diseases have steadily increased, whilst death rates have risen.

7. There are clear countrywide needs for funds and manpower for the Ministry of Health, and for Mulago Hospital with its responsibility for teaching and carrying out research. If the existing situation is to be prevented from deteriorating further, urgent action is required.

The Task Ahead

8. The rehabilitation of health services will involve repair and renovation of damaged hospitals and residential buildings. It will also involve construction of new storage facilities at Entebbe, Masaka, Mbarara, Gulu and Mbale. The replacement of

furniture and damaged equipment is essential and adequate supplies of drugs and other medical accessories including vehicles will have to be made available in sufficient quantities.

9. In 1970, according to the information given by the Ministry of Health, there were about 1,650 doctors in Uganda. By the middle of June, 1979, this figure was reduced to 620, with the major depletion of doctors having taken place in missionary rather than government hospitals. There are now some 191 key vacancies in the Ministry and Mulago Hospital. If these posts are to be filled, apart from the possibility of getting assistance from bilateral and international agencies, concerted efforts will have to be made to attract some, if not all, of the Ugandan doctors now working outside Uganda - estimated to number 124.

Policies and Resources Needed

10. Soon after the war, the Ministry of Health set up six committees to look into the various aspects of rehabilitating health services throughout the country. However, at the time of writing this report, most of these committees had not completed their work, so it has not been possible to incorporate their findings and recommendations here, except on a few issues which require urgent action. It is, however, hoped that when they have completed their work, a realistic assessment of the entire country's needs and resource requirements will be made. The remaining part of this report gives details, therefore, of the financial and manpower requirements for items of expenditure we consider vital in the course of the next financial year 1979/80.

11. Details of the estimated financial requirements for the year 1979/80 are shown in Annex 22.1. The programme of expenditure will involve a total sum of Shs. 305.7 m. of which Shs. 265.9 m. will be in foreign exchange.

12. We obtained a list of manpower requirements from the Ministry and after critical scrutiny and discussion with them, we recommend that of their proposals, the following posts be accorded priority.

- One Health Economist:

It is felt that the current disruption offers a golden opportunity for relief work to merge smoothly with general development in the health field. The planning unit is being put together. The director has been appointed and the Economist is needed to get the unit moving.

(WHO has been approached for this post).

- One Senior Pharmacist.

- One Stores Manager and Purchasing Officer:

During the current emergency and before stores start coming this officer is urgently required to give the department a good start. Without this officer the present staff will be too hard pressed to cope with the situation.

(The British High Commissioner in Uganda has been approached for assistance on this post).

- One Chief Medical Entomologist.

- One Medical Entomologist:

With emphasis on public health, vector control is considered very important, particularly for and during the preparation of the health plan.

- One Audio Visual Technician:
With the community demoralised by the last eight years, the Ministry feels an urgent need to reach people through Radio and TV.
- One Medical Pharmacologist:
Work on local plants should not be allowed to lapse. Although the post is of low priority for rehabilitation, still the work to be done is considered urgent.
- One Public Health Engineer.
- One Hospital Administrator:
Mulago Hospital (1,547 beds) has deteriorated very badly and needs an experienced administrator to put it back into shape, particularly at this time when rehabilitation is on the way.
(The Crown Agents have been approached about this post).

13. The manpower needs at Mulago are staggering and it is indeed remarkable that the present staff have kept the hospital going in spite of these deficiencies. With the exception of administration, few departments are at reasonable strength. In the Anatomy Department, for example, there are two anatomists out of the establishment of nine. For the Anaesthesia Department there is only one anaesthetist out of the establishment of eight - an alarming situation. As in all 'developing' countries, shortages are not unusual, but in the case of Mulago Hospital some departments are so depleted that the mere maintenance of the service, let alone teaching, is threatened. The following posts are considered top priorities:

- Two Pharmacologists - they have none on the staff.
(One scholarship has been sought from CFTC and a qualified candidate is available).
- Two Anaesthetists - see above.
- One Orthopaedic Surgeon (two posts are filled out of ten).
- One Microbiologist (one post filled out of fifteen).
- One Biochemist (one post filled out of thirteen).
- Two Dieticians - they have none.
- One Medical Equipment Maintenance Engineer.

14. Even if these posts were to be filled, the needs would still be great - but it is felt their recruitment would revitalise the morale of both staff and students and prevent collapse. With these 10 posts filled, the deficiency still would stand at 181. It is stressed that with the exception of dieticians, these are all established posts with financial provisions in both the Ministry and Medical School budgets. Topping up of salaries would make them attractive and ease recruitment.

15. Recruitment for these posts, few as they are, will not be easy in view of the general shortage of such qualified people - hence the recommendation that the medical faculty be granted a fund of Shs. 1.5 m. for some years to come to enable it to invite visiting professors and lecturers from outside, as and when they become available. Mulago can also make use of the existing machinery whereby the consultants at Nairobi,

Dar-es-Salaam and Lusaka can be employed through the Regional Commonwealth Health Secretariat at Arusha.

16. As in the case of the Ministry the main cause of the difficulties at Mulago has been lack of foreign exchange - the library, laboratories and the hospital itself have suffered. The standard of teaching however has remained good in spite of the shortage of staff. External examiners have come from abroad (under the military regime those from traditional sources could not come), and the reports have been remarkably good. Although some Ugandan exiles are coming back, the University because of the salary scales, has some apprehension about getting them all or being able to recruit more.

17. Anyone who has seen some of the damage to the health services must fear that outside help might not be available quickly enough and in sufficient quantity to meet the expectations of the people. The Government will find it difficult to fund all the emergency needs it faces. Detailed planning for rehabilitation is bound to take time, and meanwhile deterioration will continue. In the circumstances, it will be necessary to get some minor but important work done locally at little expense in order to get some services started, e.g. the Government could provide imported materials with the community providing labour and some local materials. This could be one method of expediting recovery and revitalising morale which had sunk very low during the military regime.

External Assistance

18. The Red Cross is already in the field and some Catholic organisations have given help. The distribution of aid independent of Government is however causing concern. The authorities need to know who is giving what and to whom, thus ensuring equitable distribution both now and when more supplies become available.

19. The UNDP Resident Representative is already in Kampala. Among the United Nations agencies, WHO and UNICEF have so far been active. WHO has been involved in the programme for cholera which started before the crisis, but is now reported to be under control.

20. UNICEF has provided Shs. 18.8 m. for maternal and child health kits to equip 300 health centres. They are also to restore 7,400 water boreholes, and water pumps in Kampala. An audio-visual technician is to arrive in the country very soon. In addition, they are sending a consultant to prepare a primary health care programme for the next three years.

21. DANIDA has offered to finance the Paramedical College and the Dental unit at Mulago. The British Government has offered some grants and the Crown Agents' experts in different fields are currently assessing not only immediate relief needs but also the rehabilitation of Mulago Hospital. (Their report should be useful to Government in seeking support). Some equipment has been ordered and as aid starts moving, other donors, both actual and potential, can be informed of the items received and expected. Currently, Norway is examining the rehabilitation of Masaka and Mbarara Hospitals.

22. The need for coordination is not only obvious but also vital if rehabilitation is to succeed. Furthermore, without coordination, too much of one needed item may cause storage problems and wastage which discourages the would-be donors. Moreover, one area of the country could have too big a share of the cake which would cause political problems. Effective machinery is urgently needed to coordinate the entire rehabilitation and reconstruction programme.

23. Although a number of voluntary and international agencies and a number of foreign governments are actively assisting the new Uganda Government to rehabilitate its health services, the gap between needs and resources is still wide. If these needs are to be realised, external assistance in the form of manpower and finance to fund basic operational needs is vital.

* Health: Summary of Estimated Financial Requirements
for Priority Items of Expenditure during the
Financial Year 1979/80.

<u>ITEM OF EXPENDITURE</u>	1979/80 (Shs. m.)	
	<u>Total Cost</u>	<u>Foreign Exchange</u>
1. Repair and Renovation of hospital buildings	70.4	52.8
2. ** Prefabricated Houses (121 units)	36.3	27.2
3. Central Medical Stores Entebbe	6.0	4.5
4. Regional Medical Stores (Masaka, Mbarara, Gulu & Mbale)	10.5	7.9
5. Vehicles	30.0	30.0
6. Hospital and Medical Equipment		
(i) Ministry	10.5	10.5
(ii) Mulago Hospital (Cardiac and Neuro-surgical units)	25.0	25.0
7. Drugs and Sundries	80.0	80.0
8. Teaching Materials	1.0	1.0
9. Mulago Hospital Radiotherapy Unit	36.0	27.0
TOTAL	305.7	265.9

* Source of Data - Ministry of Health

** The total number of 121 prefabricated units will be put up in the following areas:-

Mulago Hospital	(20)	Butabika Hospital	(20)
Bundibugyo Hospital	(3)	Masindi	(3)
Kapchorwa	(3)	Hoima	(5)
Fort Portal	(10)	Masaka	(20)
Mbarara	(20)		

HOUSING

E.R. Richardson and Ruckia Hamisi

ROOTS OF THE PROBLEMS

1. Housing in urban areas in Uganda is today provided by the Ministry of National Reconstruction and Rehabilitation (previously the Ministry of Housing and Public Buildings), urban authorities, National Housing Construction Corporation, private building contractors and individuals. It is estimated that houses owned by the Government and parastatals bodies constitute between 15 and 20% of urban housing. This paper deals with the activities in this sector of the new Ministry of National Reconstruction and Rehabilitation and attempts to identify needs and the resources required to satisfy these needs during the rehabilitation period.

2. The activities of the Government have so far concentrated on the provision of staff houses at very heavily subsidised rents. For instance, for an average three to four bedroom house occupied by any senior government official earning above Shs. 2,900 per month, the rent charged ranges from Shs. 70 to 100 per month, Shs. 100 being the maximum rent any senior public employee is required to pay. Government rents are standardised throughout the country. Similar properties rented at commercial rates would fetch anything from Shs. 3,000 to 4,000 per month.

3. All Uganda public employees are 'eligible' to rent government staff houses at subsidised rentals when houses are available; and all expatriates working for the Government are 'entitled' to be accommodated in government supplied houses. By this rule, Government gives priority to the accommodation of expatriate officials over that of Ugandan public employees.

War Damage and Looting

4. Although a comprehensive survey has not yet been carried out on the damage caused by the war to offices and houses, reports received so far indicate that Mbarara and Masaka, where major battles took place and which changed hands more than once, suffered the most serious structural damage. Many buildings were razed completely and roofs and ceilings were burnt. Further damage was caused by looting, destruction of windows, doors, hinges, locks, electrical fittings, etc., and theft of furniture and roofing material.

5. Overall war damage aggravated an already deteriorating housing situation. Whereas on the Government side housing stock has substantially remained at a standstill for the last eight years, lack of capital, inadequate supplies of building materials, construction equipment, tools and spares has made it difficult for the private sector to provide adequate housing especially for people in the low income group. Ever-rising building costs (the government-controlled price for a bag of cement is Shs. 100, but the magendo price is Shs. 500) discouraged private initiative and made it impossible for private individuals to avail themselves of mortgages from the housing finance institutions under existing mortgage terms.

6. Housing finance institutions limit the amount they will lend on a house by reference both to the estimated cost of building and the ratio of the mortgage payments to the owner's income. The stipulations are these:

- Mortgage payments on an owner-occupied house, with interest in the neighbourhood of 8.5% per annum and repayment within 15 years, must not be higher than one third of the borrower's family income
- a limit which is not out of line with arrangements found in many other countries. The limit is understood to be somewhat higher

where the house is built to be let for rental. The other limit however is prohibitive. The ceiling on the mortgage to be allowed on a single dwelling was Shs. 180,000 from 1970 until 1977 when it was raised to Shs. 250,000. It has been Shs. 350,000 since early this year.

As the average three-bedroom two-bathroom house in Kampala or Jinja now costs between Shs. 750,000 and 800,000 to put up, it is not difficult to find another reason why so few new homes are being built. For how many families can find Shs. 400,000 or 450,000 to meet their share of the cost of a new house? The housing finance companies in the meantime contend with the problem of excess liquidity. The statutory Housing Finance Company of Uganda reported a cash surplus of Shs. 19.2 m. at the end of 1978.

THE REHABILITATION TASK

The Needs

7. We understand that proposals for a new policy on housing have been prepared in the Ministry of National Reconstruction and should soon be submitted for Cabinet approval, but we are not aware of its details. Clearly, the Government has a three-fold task to carry out in the rehabilitation period:

- (i) War damage must be repaired and looted dwellings refurnished as quickly as possible. Priority must be given to the government-owned houses, since it is essential that the administrative machinery of Government be restored to proper working order as early as it can be.
- (ii) The Government must embark on a long-term programme of new housing construction aimed at making good the stagnation of the past eight years, and providing for population growth as well as some resettlement of returning exiles.
- (iii) Suitable housing must be made available for the hundreds of foreign specialists who will be invited to come to Uganda under technical assistance programmes to assist the rehabilitation effort.

This task must be accomplished without prejudice to non-residential construction such as the rebuilding of town centres and commercial areas in Masaka and Mbarara.

8. The repair of war damage to government houses is estimated to require Shs. 384 m. of which about Shs. 306.2 m. will be the foreign exchange element in the total expenditure. The provision in the capital budget for the first year is sufficient only to ensure that the repair may begin immediately.

9. According to officials in the Ministry, the additional requirement of new housing, compiled without benefit of a detailed housing survey, is 160,000 units broken down as follows:

- 128,000 units for low income families
(i.e., earning between Shs. 240 and 990 per month)
- 24,000 units for middle income families
(i.e., earning from Shs. 990 to 2,900 per month) and
- 8,000 units for high income families
(those earning over Shs. 2,900 per month)

10. A more reliable assessment of the needs should be made through a detailed housing survey very early in the reconstruction period. It is already obvious, however, that no significant attack on the housing problem can be made unless building materials, equipment and personnel can become available from sources outside Uganda. So the Ministry has plans to make full use of prefabricated housing units which can be imported in quantity. Donor countries, especially those with well developed prefabricating capacity may wish to come to Uganda's aid and provide a few thousand units each year at concessional prices. These units will almost certainly have to

reach the occupiers at subsidised prices.

11. Whatever the established needs may be, however, it is usually the proportion of national resources in terms of finance, material, land and personnel, that can be devoted to housing, which determines the size of the annual building programme, and we see no reason to question the Ministry's proposal to provide for 11,405 units in the first two years.

12. The housing required for the foreign technical assistance personnel can be found in part from existing government houses and partly from the high income portion (560 units) of the two-year programme mentioned above.

Policies and Resources Required

13. In order to accomplish even the comparatively modest programme envisaged for the rehabilitation period, the Government will need to adopt whatever measures may be required to bring the local manufacture of cement up to the maximum capacity of the two plants at Tororo and Ilima (see the comments on cement in the industry sector paper). The Government should also give immediate attention to removing the institutional obstacles to the flow of mortgage funds into housing from the insurance as well as the regular housing finance companies. The six domestic insurance companies at present operating in Uganda had total assets of Shs. 420 m. at December last, but had put only 18% of their investments into mortgages and have over Shs. 60 m. in liquid cash. Pressure should be exerted on the two groups of institutions to raise the ceiling on their mortgage loans. They should readily agree to go up to 70%, but should be pressed to go up to 80 or 85%. If required, the Government should be prepared to institute a mortgage insurance facility to cover the excess loan over 70%. A once-for-all premium of 2 or 2.5% on the total loan payable by the borrower has been found elsewhere quite sufficient to finance a viable insurance programme in normal business conditions.

14. As for the building programme, the 11,045 units to be built in 1979/80 and 1980/81 will cost, overall, Shs. 1,754 m., of which Shs. 1,316 m. will be foreign exchange. For 1,780 prefabricated units the cost will be Shs. 775.4 m.; and Shs. 586.1 m. of this amount will be the foreign exchange cost. The 4,675 conventional houses will call for Shs. 734.5 m. of foreign exchange out of a total cost of Shs. 974.4 m. The distribution of the programme between conventional and pre-fabrication types is shown in Table 23.1.

Table 23.1
Structure of Building Programme

Type	No. of Houses	Estimated cost per unit (Shs.)	Total Cost (Shs.m.)	Foreign Exchange (Shs.m.)
<u>Prefabricated Houses</u>				
Middle income group	450	216,000	97	73
Low income group	6,280	108,000	678	509
Sub-total (i)	6,730		775	582
<u>Conventional Houses</u>				
High income group	560	360,000	202	151
Middle income group	1,605	250,000	401	301
Low income group	2,510	150,000	376	282
Sub-total (ii)	4,675		979	734
Grand Total (iii)	11,405		1,754	1,316

15. The Ministry will also require the following key posts of Senior Electrical Engineer, Senior Executive Engineer, Principal Building Surveyor, Housing Officer and Chief Supplies Officer to be filled by non-Ugandans. Training for Ugandans is required in the fields of building survey, quantity survey, architecture, civil, and also in mechanical and electrical engineering, and housing and estate management.

16. Given the present acute shortage of houses all over the country, it is clear that if this shortage is to be reduced, a concerted effort will have to be made by the Government to encourage private companies to participate in this sector effectively and make arrangements for them to obtain the necessary spares, equipment and building materials. To ensure that adequate local supplies of building materials are available, it will also be necessary to revive the building materials industry which, like other sectors of industry, has experienced a substantial decline during the past nine years.

17. The construction industry on the whole badly needs more supplies of construction equipment, vehicles and materials. It also requires to increase the contracting capacity and its managerial and technical know-how. Once again efforts will have to be directed towards alleviating these deficiencies.

18. Finally, we consider that the Government ought to review its policy on public officers' housing, which influences practice in the non-government sector as well. The rental charged for a government house is now a mere fraction of the amount which would be paid in the open market, and the charges for a house, when available, involve a different rate of subsidy from the rate applied in the allowance paid when no residence is provided. The rates of subsidy should be made more uniform and Government might have to take the opportunity to reduce them as soon as civil service salaries can be raised. The long term objective of policy should be to dispense with housing, subsidised or otherwise, for all except the most senior officials, and raise rates of pay sufficiently to enable the average public officer to provide his own housing.

19. The phasing of the proposed expenditure over the rehabilitation period is indicated in Table 23.2. To allow time for the recovery of cement production, all the middle income conventional building, and one half of the high income programme, is deferred until 1980/81.

Table 23.2
Summary of Capital Expenditure for Housing

	1979/80			Capital		
	Local	Foreign	Total	Local	Foreign	Total
				(Shs.m.)		
<u>Repairs</u>	78	306	384	-	-	-
<u>New Buildings:</u>						
High Income	25	76	101	25	76	101
Middle Income Conventional	-	-	-	100	301	401
Middle Income Prefabricated	-	-	-	24	73	97
Low Income Prefabricated	169	509	678	-	-	-
Low Income Conventional	-	-	-	94	282	377
	272	891	1163	244	731	976

WATER SUPPLY AND SEWERAGE

Donald F. Peckham

1. Water supply and sewerage disposal in the urban centres of Kampala, Entebbe and Jinja are controlled by the National Water and Sewerage Corporation. Water supply in all other areas of Uganda is controlled by the Water Development Department.

2. Sewerage facilities in the areas outside the three major urban centres are partially controlled by local authorities and partially by the Water Development Department. The facilities are extremely primitive with the only treatment in many areas being oxidation ponds. The rural sewerage systems should not be considered as rehabilitation per se, but once the rehabilitation period has passed, then improvement of rural sewerage should be considered a matter of high priority, especially in areas of larger population.

NATIONAL WATER AND SEWERAGE CORPORATION

(a) WATER SUPPLY

3. The pumping and treatment works at Gaba (Kampala) and Jinja were inspected. The works at Entebbe were not inspected but we were advised that the condition is similar to those seen.

4. In 1969/70 the three water-supply works were controlled by separate authorities. Details of Jinja and Entebbe are not available but annual statistics for Kampala were:

Table 24.1

Kampala Water Works 1969/70

Pumpage (m. cu. metres)	13.8
Water consumption (m. cu. metres)	13.8
Income (Shs.m.)	13.6
Expenditure (Shs.m.)	13.5

Current annual outputs are shown in Table 24.2

Table 24.2

Urban Water Works 1978

	<u>Kampala</u>	<u>Entebbe</u>	<u>Jinja</u>
Pumpage (m. cu. metres)	19.5	1.8	6.8
Water consumption (m. cu. metres)	19.5	1.8	6.8
Expenditures (Shs.m.)	23.0	0.8	2.3
Income (Shs.m.)	19.3	0.9	8.1

Source: Information supplied by the Director of NWSC

5. Physical damage at the three centres, as a result of the liberation war, is negligible. However, the results of looting are more serious as many vehicles were stolen and various items of furniture, records, tools and minor equipment either stolen or destroyed. None of the pumping stations was capable of meeting consumer demand before the war. Due to the lack of foreign exchange over eight years, essential spare parts, replacements and minor tools and equipment were not available and this has resulted in serious deficiencies in purification levels, and operation at well below design capacities.

6. The appallingly serious situation regarding the urban water supply systems is illustrated by the data for Kampala.

Table 24.3

Current demand	36.8 m.cu.m./annum
Estimated 1980 demand	41.4 "
Designed intake capacity	43.8 "
Actual intake capacity	26.3 "
Maximum output of plant	26.3 "
Maximum output of high and low level delivery pumps	26.4 "

Source: Information supplied by the Director of NWSC

7. From Table 24.3 above it can be seen the maximum output of the Kampala system is 24.6 m.cu.m. per annum. This is 66.8% of current demand and 59.4% of the estimated 1980 demand. From data quoted in Tables 24.2 - 3 the actual current supply of 19.5 m.cu.m. per annum is 53.6% of current demand and 47.2% of the estimated 1980 demand. This results in frequent water interruption in Kampala, as water to various districts is cut off in order to replenish the reservoirs of treated water.

Needs And Costs

8. In order to correct the imbalance of supply and demand it is necessary to rehabilitate the existing plant and increase the capacity of what are now the binding constraints on output. Specific details of requirements are retained on file, and costs towards this end are included in Table 24.4. An on-going programme to increase capacity will then be required and therefore any work carried out in the coming two years must be compatible with future improvements. The purification cycle is far from effective at the three plants. At Kampala, the raw water passes through a mesh grid filter. This filter is non-existent. None of the micro-strainers were in operation because of faulty bearings, lack of mesh elements and the need for electrical overhaul. The candy pressure filters are all in operation but half of the gravity sand filters are not being used because a new compressor required for back-washing has not been commissioned. The remaining gravity sand filters are being used although the sophisticated automatic back wash system has failed. The automatic liquid chlorine injection system has not been used due to faults, for some time. Both raw and fresh water pumps are in need of overhaul as frequent breakdowns occur. Serious leakages are evident throughout the system.

9. The situation at Jinja and Entebbe is similar to that at Kampala. The necessary cost for rehabilitation in foreign exchange and local currency is contained in Table 24.4. Again, specific details of requirements are retained on file. The tabulated costs do not include normal operating expenses which should be balanced by income.

Table 24.4
Rehabilitation Costs (US\$ m.)

	<u>1979/80</u>		<u>1980/81</u>	
	F.E.	LOCAL	F.E.	LOCAL
Kampala	18.5	5.0	11.3	3.0
Jinja	6.7	1.6	14.2	4.0
Entebbe	2.9	0.9	2.0	0.5
TOTAL	28.1	7.5	27.5	7.5

Source: Estimates derived from detailed lists of items required.

10. In concluding this section of the paper, I cannot stress too strongly the urgent need to improve the quality and increase the capacity of the urban water supply systems. Failure to recognise the severity of the situation and to allow rehabilitation to become a protracted operation may well result in epidemics of water borne diseases. If this occurs, then the cost to the community in terms of medical resources and loss of production may well exceed the cost of the preventative actions of rehabilitation. It is considered essential that the total funds indicated in Table 24.4, less foreign aid committed, be allocated.

b) URBAN SEWERAGE

11. As stated previously, the National Water and Sewerage Corporation controls sewerage plants at Kampala, Jinja and Entebbe, and in these areas only 40% of the properties have sewer connections with the remainder having septic tanks or other facilities. The Kampala plant which was functioning satisfactorily in 1970 was inspected and is virtually non-operational. The sewerage plants at Jinja and Entebbe have not been inspected but their condition is reported to be similar to that at Kampala. Discussion will centre on the sewerage treatment plant at Kampala with only estimated costs and needs being offered at the other two centres. The information for these needs has been supplied by the Director of the National Water and Sewerage Corporation.

12. The sewerage system in Kampala is mainly fed by gravity but two pumping stations cater for low lying areas. One of these stations is not in operation and the other is working at well below design capacity. The overall treatment system is of good design and has been in operation for many years, with design and capacity improvements added at various periods. However, because of the lack of spare parts caused by the shortage of foreign exchange, most of the system is ineffective. Neither of the comminutors, nor the detritus tank is functioning. Flow recorders have been installed but not commissioned. Sedimentary tanks are full of solids. The pumps to the digestors are not in working order. One of the digestors has never been commissioned and the other is not functioning. Sludge pumps have failed and therefore drying beds are not in use. There is also a recirculation system using rising mains but even if it were needed, this system has failed due to faulty pumps.

13. From the brief description given above it may be deduced that virtually raw effluent is passing into the sewerage outlet to the Nakivuba Channel and thence to Lake Victoria.

War Damage

14. There is virtually no damage which can be attributed to the recent liberation war. The present deplorable condition of the sewerage plant is solely the result of years of neglect throughout the period of the Amin regime.

Needs

15. The immediate needs are for workshop rehabilitation, electrical repairs and the provision of spare parts, chemicals, minor tools and equipment. The first aim must be the rehabilitation of the existing system. Inspection shows that this means principally the overhaul and/or replacement of the pumping equipment at the various points in the overall system.

16. Just before the liberation war a British firm, Humphreys and Sons, was constructing extensions and modernising recording equipment. This work was so advanced and near completion that steps should be taken to complete the extension project. This will involve comparatively little expenditure but will result in much higher treatment levels and capacity.

17. Because of the serious risk to community health that now exists, as much of this work as possible must be done in financial year 1979/80, with any outstanding work completed the following year. The virtually untreated sewerage enters the Nakivubo Channel at a point approximately three miles from the Lake Victoria water intake at Gaba. The natural flow of the Nakivubo Channel is in the direction of Gaba which puts additional stress on the already unsatisfactory water treatment plant.

Estimated Financial Requirements

18. The following modest capital investment, in terms of foreign exchange and local currency is needed to rehabilitate the sewerage systems at Kampala, Jinja and Entebbe:

1979/80 - Shs.11m. - Foreign Exchange
" 5m. - Local

1980/81 - Shs.13m. - Foreign Exchange
" 6m. - Local

(These estimates have been derived from detailed lists of items required, supplied by the Director of NWSC).

On-going capital expenditure should then be undertaken, using the Corporation's restored financial viability, so the service can be extended.

Expertise

19. Discussions with senior officials of the Corporation lead me to believe that the indigenous staff is quite capable of operating and maintaining the various sewerage works, if they have the necessary workshop facilities and continuous supply of spare parts.

20. Some contractual expatriate expertise however will be necessary to complete the installation of the capital works, the overhaul, and/or to instal pumping systems.

WATER DEVELOPMENT DEPARTMENT

21. As stated at the beginning of this section, the Water Development Department is responsible for the national water supply and some associated functions outside the three main urban areas. Water supply in 1970 was generally not satisfactory and a feasibility study was commissioned and carried out by Messrs. Norconsult of Norway under the auspices of the African Development Bank (using a 20-year design period, 1970-90 to cater for demand to A.D. 2000). Also, a feasibility study was undertaken on behalf of the World Health Organisation which adopted a thirty year period to the year 2000.

22. The Department operates 24 water supply pumping stations and is responsible for the sinking and maintenance of many thousands of boreholes operated either by hand or motorised pumps. The construction section builds and maintains water catchment facilities and the Department also operates a hydrology section.

23. As in the urban water supply area, physical war damage has been negligible in the regions that could be assessed. However, the actual pumping capacity of the supply stations has fallen over the last 10 years and, in terms of supply per capita, this reduction is even more pronounced. This situation has occurred, as in other areas, because of the lack of foreign exchange to purchase spare parts and equipment replacements. The looting which occurred during the liberation war has worsened the situation, as many vehicles, items of plant and equipment, records, office furniture and spare parts have been stolen or wantonly destroyed.

24. If rehabilitation is not carried out at a reasonable level the rural water supply system will continue to deteriorate and lead to grave health problems. Essentially, the Department must be re-equipped with vehicles, plant and equipment, spare parts for existing machinery, office furniture etc. Pumps and liquid chlorine injectors have failed in many areas and a workshop capable of maintaining this kind of equipment is essential. Costs, over and above normal operating expenses are estimated below. These costs are based on a detailed itemisation of needs which are retained on file. The itemised needs have been examined and are considered to be reasonable based on current information.

Table 24.5
Estimated Rehabilitation Costs

	<u>1979/80</u>		<u>1980/81</u>	
	F.E.	LOCAL	F.E.	LOCAL
Water Supply Stations	13.1	30.0	5.1	10.1
Construction Division	23.5	5.1	11.9	2.8
Control Workshop	2.4	3.2	-	-
Drilling Division	30.8	6.2	18.7	3.7
Hydrological Division	1.0	-	0.8	-
TOTAL	70.8	44.5	36.5	16.6

AVAILABILITY OF FUNDS

25. If the essential funding itemised throughout this paper cannot be obtained then reductions should be on a percentage basis. If any reductions in funding are enforced then obviously the rehabilitation exercise will extend beyond the 1980/81 period and the risks of disease will increase.

26. Commitments of external aid of which we have been advised are listed below:

UNICEF	- Rehabilitation and sinking of boreholes over a three year period. Approximately 4,500 in number.
United Kingdom	- Supply of water pumps. Value Shs. 1.5m.
EEC	- Water and Sewerage. Value Shs. 20m.

It is presumed that the aid will be in the form of foreign exchange but details are not available.

FINANCE AND ADMINISTRATION

FOREIGN EXCHANGE POLICY

Gerry Helleiner

Introduction

1. It is impossible to consider the issues surrounding foreign exchange and exchange rate policy without placing them in the context of overall policy objectives and constraints. The economy of Uganda is at present afflicted with a severe shortage of imported goods and services: agricultural and industrial inputs, spare parts, essential consumer goods, machinery and equipment. This shortage has not only caused vast underutilisation of productive capacity but has also generated high prices, together with the dissatisfaction and low labour productivity associated with the lowered real incomes. Government attempts to hold down prices for scarce products through price controls have merely generated high magendo profits for favoured buyers who resell on thriving free markets. It must therefore be a major objective of Government to find means of paying for the increased imports which the economy so desperately requires. At the same time it should seek to reduce the opportunities for and incomes from magendo activities.

The Earning of Foreign Exchange

2. Every effort must be made to acquire official development assistance and to borrow from other sources at reasonable terms. It is also to be hoped that world prices for Ugandan exports will rise, and - though this seems very unlikely - that the prices of Ugandan imports will fall. But there is ultimately very little which Uganda can do either about the decisions made by potential foreign sources of capital or about its external terms of trade. The only area for major independent initiative by the Government of Uganda in its struggle for expanded means of acquiring crucial imports is its export policy.

3. The Ugandan export volume has fallen drastically in recent years. Vast quantities of Ugandan coffee (an estimated 50,000 - 60,000 tonnes per year) have been smuggled across foreign borders, thus earning the country lower earnings and depriving the Government of needed revenues; reduced picking, abandoned acreage and accumulation of unsold stocks have been further causes of declining coffee exports. Similar declines have occurred in the exports of tea and cotton, which would have declined even more had the Government not provided them with subsidies to offset their rising costs. (At the same time declining production in the sugar, tobacco and other industries have led to unnecessary increases in the demand for imports). There is at present substantial unutilised or underutilised capacity in the agricultural sector, particularly in the export crops.

4. It should therefore be Ugandan policy:

- (i) to move into official marketing channels all produce now being smuggled across the borders, particularly coffee (but also some cotton and cattle);
- (ii) to provide adequate incentives for the full utilisation of under-utilised and low-cost agricultural resources (including those in processing facilities), the rehabilitation of socially productive agricultural assets which are currently abandoned (11,000 ha. in tea; 25,000 ha. in sugar, and unknown areas in coffee), and the adoption of socially profitable innovations in export crop production.

5. These objectives can be attained by substantial increases in the real returns offered to agricultural export producers, notably those in coffee, tea and cotton. The analysis in the Commonwealth Team's report on agriculture shows the precise extent of the real grower price increases which are needed. The timing of these increases must be considered in the light of possible physical constraints on transport and processing capacity for the expected volume expansion.

6. How are the increases in real grower prices to be realised and how are they to be financed? We have encountered two basic approaches to the first of these questions. The first seeks to lower the money prices for farm inputs and the consumer-goods which growers purchase with their earnings. The second seeks to raise the money prices for grower outputs - of coffee, tea and cotton.

7. The lowering of input prices implies government subsidies, which immediately raises the question of how they are to be financed (see below). It also restricts the benefits to that minority of Ugandan farmers which at present employs such off-farm inputs, and the subsidised inputs create the potential for magendo activities and abuse of administrative discretion. The lowering of consumer good prices would, if it were possible, be a desirable way of increasing incentives for both urban and rural productive activities, and might eventually even help to bring down uncontrolled wage rates. But it is the underlying scarcity of consumer goods which is responsible for their high prices. Lowering control prices will achieve nothing. Unless some new and continuing source of foreign exchange appears which can be employed to increase consumer good imports and restart Uganda's factories, there is no prospect of reducing these prices. Even if that were achieved - and there is no evident means through which it could be - it would still not alter the structure of relative agricultural prices, and would not necessarily therefore achieve the reallocation of effort toward agricultural exports (and some import-substituting cash crops like sugar and tobacco) which is sought. Indeed, downward 'stickiness' of prices might even limit absolute price reductions.

8. The raising of prices for grower output (and, in the case of cotton, the margins for processing) - the second approach - requires analysis of how it could be financed. The team has calculated that the prices required in order for the major agricultural exports to be effectively revived are Shs.6 per kg. seed cotton (up from Shs.5); Shs.7 per kg. kiboko (robusta coffee) (up from Shs.3.50); and Shs.2 per kg. green leaf tea (up from Shs.1.25). The payment of these higher prices implies increased subsidies to tea and cotton exports, and the lowering of the export tax on coffee. The effects would be as follows:

- As exports activity revived in response to these incentives, volumes would increase and the size of the subsidies - particularly in the case of cotton, would soon become very large. With high world coffee prices it might be possible to retain significant export taxes on coffee exports, but grower prices would still have to be kept roughly in line with Kenya ones, while the Ministry of Finance would chafe at the resultant foregone revenues. The only possible sources of the increased tax revenues which could offset these subsidies and tax losses are import duties and sales taxes. Since these would be paid only by those who import at official exchange rates, such increased taxes could have the extra benefit of cutting somewhat into the potential magendo margins between the prices paid by importers - with preferential access to foreign exchange - and free market prices. But the political implications of raising taxes steeply for the purpose of subsidising particular groups of farmers could be serious.

9. Another means of financing higher grower prices for coffee, tea, cotton and other exports is an increase, by the Bank of Uganda, of the value of foreign exchange earnings in terms of Ugandan shillings, i.e. devaluation. This would provide explicit and obvious recognition of the high value which Uganda must at present place upon foreign exchange, recognition which is implicit in the present tight foreign exchange controls. It also quickly generates large tax revenues. Table 25.1 shows the implications of varying degrees of devaluation for the total governmental surplus or subsidy (per kg. at the grower level) in the external marketing of coffee, cotton and tea at current (or proposed) grower prices. (The calculations are those of D.G.R. Belshaw. Their methodology is discussed in Paper 3). It should be evident that devaluation provides a convenient possible means of providing the necessary incentives to agricultural exporting without placing new burdens upon the revenues of the Ministry of Finance. To the contrary, it could provide substantially expanded coffee export tax revenues. With a grower price for kiboko of Shs.7 per kg., a 50% devaluation with a world price of \$1.70 per lb. raises Government revenues by about Shs.18,000 per tonne; or, on expected volumes of export, by Shs.2,000 m. or more.

Table 25.1

Producer Prices, Subsidy/Surplus and Devaluation

	No Devaluation	20% Devaluation*	33% Devaluation*	50% Devaluation*
A. COFFEE				
(Shs. per kg/kiboko)				
<u>Required grower price: 7.00+</u>				
Net export price**	13.80	17.20	20.60	27.60
Producer price++	<u>7.00</u>	<u>7.00</u>	<u>7.00</u>	<u>7.00</u>
Surplus	6.80	10.20	13.80	20.60
B. COTTON				
(Shs. per kg., seed cotton)				
<u>Required grower price: 6.00+</u>				
Net export price**	3.00	3.75	4.50	6.00
Grower price++	5.00	5.00	5.00	<u>6.00</u>
Surplus/Subsidy***	-2.00	-1.25	-.50	-
C. TEA				
(Shs per kg)				
<u>Required grower price: 2.00 (green leaf) +</u>				
Auction (Made tea price)**	9.00	11.25	13.50	18.00
Grower price, green leaf ++	1.25	1.80	2.00	<u>2.00</u>
Surplus/Subsidy, made tea***	-3.75	-3.75	-2.50	2.00

Notes:

* This percentage refers to the percentage decrease in the value of the Ugandan shilling in terms of foreign currency. For example, if one shilling now costs 1/8 of a US dollar, whereas after devaluation it costs 1/16, a devaluation of 50% is said to have occurred.

** Net of processing, selling costs, etc.

*** Minus sign indicates subsidy.

+ Required to induce full utilisation of potential.

++ Where the required grower price for full utilisation of potential can be paid without a subsidy this is shown, and the figure is underlined. Otherwise, the current actual price is shown.

Source: Commonwealth Team Estimates.

The Use of Foreign Exchange

10. The extreme scarcity of foreign exchange implies that there may be very high rewards to those fortunate enough to acquire it. The black market price of foreign currency in terms of Ugandan currency is substantially higher than that at which the Bank of Uganda makes it available to licensed importers. Were it not for the follow up activities of the foreign exchange control authorities the Bank's allocations could indeed immediately be sold on 'free' markets at a huge profit. The shortages of imported products within Uganda obviously offer profit opportunities to licensed importers and their friends which are not inherently different from such currency profiteering. Where there is no control price, the opportunity for profit is provided directly to the importer by giving him the right to purchase at a low price that which is selling at a high one. (This obviously is as true of goods supplied by foreign aid donors as of those supplied from commercial sources). Where the Government of Uganda has fixed the prices of imported goods there exists a thriving 'uncontrolled' market in which prices for the same items are much higher. It follows that whoever is given access to the scarce goods at the control prices can earn an enormous profit by selling on the uncontrolled market; and the importer can decide who the lucky ones are. In some recent cases, imports intended for Uganda have quickly found their way into foreign countries because the importers who have obtained them cheaply found that the highest profits could be earned by selling them elsewhere. Thus the opportunities created by import licensing and foreign exchange controls for magendo profits can be very large. This type of profiteering is not in the national interest. It is therefore important that the system of import allocation and the eventual distribution system be carefully planned.

11. There are different ways in which the opportunities created for magendo profits on imports (or, for that matter, on locally produced goods) can be reduced or eliminated. All of them depend ultimately on the reduction or elimination of the differential between control prices and free market prices; for as long as a differential exists there will be strong motivation for profiteers to take advantage of it. And all of them involve a transfer of potential magendo profits to the Government of Uganda, which certainly needs the revenues in the present time of national crisis.

12. One way is to impose a tax - an import duty or a sales tax - on the imports which the favoured (licensed) importer acquires with the foreign exchange which he is allocated. He may try to pass such a tax on to the consumer by raising his price, but there are limits to his capacity to do so because consumers can always continue to buy the same item on the free market; thus the differential between the cheap control price at which he buys (because of his access to foreign exchange at the official rate) and the free market price at which he (or his friends) sell is reduced. Another device which may be employed is public sale by the Government through competitive bidding (auctioning), of the cheap imported goods or the licenses to import them, or the foreign exchange itself - either to wholesalers or retailers. Since traders know that they can make easy profits on these items by selling them at free market prices they will bid up their price, creating revenues for the Government with the same effect as if the Government had imposed a tax on them in the first place. An auction system may sometimes be manipulated, however, by powerful interests or organised groups who conspire to keep their offer prices low. Publicity in respect of the auction prices would at least make consumers aware when they were transferring large profits to such traders; but there is no guarantee that they could do very much about it. A third device, which achieves the same effect, and which is administratively the simplest, is to increase the price of the foreign exchange which is made available to licensed importers, i.e. a devaluation of the Ugandan currency.

13. Certainly the riskiest system of import licensing and foreign exchange allocation is one which combines administrative decision-making with large differences between official prices (whether of foreign exchange or of goods) and free market prices. In such circumstances the temptations for improper exercise of influence, corruption, and profiteering are usually too great to resist. Where, as in Uganda, many have grown accustomed to earning substantial shares of their incomes through magendo activities, and where national rehabilitation depends upon the creation of a whole new work ethic, it seems to us foolhardy to retain a system with such powerful elements of temptation in it. There may be considerable reluctance within the civil service to abandon the influence, power, and income-earning opportunities with which the present arrangements provide some of its members; but it must be resisted in the national interest. Administratively the most simple means of reducing magendo opportunities and the improper use of influence is unquestionably devaluation. As has been seen, it is also

a convenient means of achieving the increases in export volume which are also sought, without burdening government revenues.

14. We recognise that, for the present, even with a devaluation, there would be no alternative but to retain very tight administrative controls upon the use of foreign exchange. But we would urge against erecting a permanent administrative apparatus - which might, once vested interests had been created, be difficult later to dismantle - for the management of what we hope will be a temporary crisis situation. While erecting a sound foreign exchange management system for the purpose of crisis control it should already be possible to move some way toward the longer-run objective of a freer economy, operating with exchange rates which do not offer incentives for improper activities.

The Management of Foreign Exchange Scarcity.

15. Crucial to the effective management of the use of scarce foreign exchange is the machinery through which it and the imports which it purchases are allocated and distributed. There are essentially three functions which the government authorities need to perform:-

- 1) the preparation of a foreign exchange budget, setting out the flows of foreign exchange expected to be available and the broad sectoral and functional allocations for their use, determined on the basis of national economic priorities;
- 2) the licensing of specific importers of specific goods and services, under the broad allocation headings established by the foreign exchange budget;
- 3) foreign exchange control, the provision of foreign exchange in the requisite amounts to licensed importers for authorised uses, and the follow-up activities to ensure that it is used for the correct purposes.

16. The foreign exchange budget must be reassessed on a regular basis, as earnings expectations change and priorities are reconsidered. An interministerial committee chaired by the Ministry of Finance or the Bank of Uganda should draw up such a budget at, say, three to six month intervals on the basis of information provided to it by the relevant government ministries and parastatals. It is usual to allow room for some unexpected contingencies so as not overly to restrict those who administer the system and to avoid the need for overfrequent review; but in present Ugandan circumstances any contingency provisions will have to be unusually small and the budget will have to be reviewed more frequently. Such a budget has already been put together in this way. It now remains to ensure that the priorities there identified and the allocations already agreed are firmly adhered to, and to systematise its implementation and regular review.

17. The administrative function of import licensing can eventually be undertaken by the Ministry of Commerce and Industry on the basis of its knowledge of the relevant sectors and with continual reference to the foreign exchange budget's allocations. At present, this function is being undertaken by the Bank of Uganda at the same time as it provides the requisite foreign exchange. This centralisation of the two functions of licensing and foreign exchange control became necessary after the breakdown of the previous licensing arrangements, the delay in the establishment of new administrative arrangements, and the urgent need for effective controls. While the Bank is performing its combined role well, it imposes a heavy extra administrative burden on an institution with important other responsibilities, and creates an undue concentration of control in one location. As soon as administrative capacity elsewhere is restored, therefore, consideration should be given to relieving the Bank of Uganda of its licensing responsibilities.

18. As has been seen, foreign exchange controls are the responsibility of the Bank of Uganda. Eight other African countries, including Tanzania and Kenya, employ the services of an international firm which specialises in the preshipment inspection of goods destined for export; the foreign exchange control authorities in these countries will not release foreign exchange to importers until they have evidence that the shipments destined for their ports are of appropriate quality, quantity and price, as certified by the firm in question. The Bank of Uganda should consider employing such foreign services as well; in doing so, it should be careful to pay only for inspection on major items, since there is some evidence to suggest that other African countries

have paid for more such services than they really need for effective foreign exchange control. Equal care must be taken to monitor other expenditures of foreign exchange, such as those on foreign interest, dividends, royalties, and fees.

19. None of this foreign exchange budget and control machinery will function unless the correct procedures are rigorously followed. Because of the wanton disregard of established channels and the widespread abuse of power within the Amin regime's system (if it can ever be called a system) of foreign exchange allocation, it is particularly important quickly to re-establish confidence in the new system. Its restoration deserves and requires firm support at the highest political level.

20. As soon as is practicable, the foreign exchange budget and licensing system should be eased in order to increase opportunities for the socially profitable use of foreign exchange by innovative Ugandans. It should be possible to make special provision at an early date for small and medium-sized local businesses which are sometimes forgotten in centralised planning exercises.

21. The increased taxes on imports or devaluation - one or the other of which is required for the expansion of export volume and the effective management of imports - is unlikely significantly to change the cost of living for the average wage and salary earner. These policy measures will simply decrease magendo trading while leaving legal prices more or less in the region of current free market prices. The only major losers would be those who now have preferred access to controlled prices. But the real returns from ordinary legal wage and salary employment have fallen to such low levels in recent years that early consideration will have to be given to their improvement, particularly at the lowest income levels. The overall economic decline of the Ugandan economy and the need to restrict spending to levels commensurate with total production makes it impossible to consider their restoration to previous real levels for some time; but, particularly at the bottom end, some relief is required to permit the realisation of the most basic needs, and to maintain labour productivity. It should be the object of wage policy, as of other price policies, to reduce the differential between controlled and 'free market' rates of return for equal labour inputs.

22. The precise mix and sequencing of Uganda's foreign exchange earning and management policies, require careful consideration and planning at the highest level. Whatever the policy mix chosen, adjustment and restructuring will be much easier to accomplish if there is programme (balance of payments) assistance from abroad while it is undertaken. Programme assistance is usually only made available, if at all, when recipient governments can demonstrate that they have instituted effective economic planning and financial controls. Uganda is unlikely to be treated any differently in this respect. This provides a further reason for the early development of effective planning and control systems.

BANKING AND CURRENCY

Gerry Helleiner and E.R. Richardson

Roots of Current Problems

Tables 26.1 and 26.2 show the main monetary changes in Uganda over the past eight years, and the monetary position at the outset of the 1979 war. Government borrowing from the banking system, primarily from the Bank of Uganda, took a steadily increasing share of total domestic credit as the private sector stagnated, tax revenues failed to keep pace with governmental demands, and financial discipline collapsed. (See paper on financial administration). While at year end of 1970, government borrowing from the banking system (including the Bank of Uganda) had amounted to no more than 39% of total domestic credit outstanding, by March 1979 it had reached 72%. The vast bulk of central bank financing of government, Shs.5,357 m. by late March 1979, was achieved through low-interest 'ways and means' loans which were far above the legal limit of 18% of recurrent budget revenues (and strictly repayable within three months of the end of the budget year in which they were made). The Central Bank thus virtually relieved the regime of the necessity to exercise any restraint on spending in the Central Government departments.

2. This orgy of financial indiscipline culminated in the last part of 1978 and the first quarter of 1979, when the Government employed credit from the Bank of Uganda to finance its requirements to a wholly unprecedented degree. In the last half of 1978 government borrowing from the Central Bank increased by 30% (by Shs. 1 bill.); in the first quarter of 1979 it rose by another 45% (another Shs. 2 bill.). From mid-1978 until the end of March, 1979, government borrowing from the Central Bank accounted for 87% of the total expansion in domestic credit over the period. The money supply in March 1979 exceeded that of a year previously by 35%. All of this monetary expansion occurred at a time when the economy was already severely disrupted, and overall economic activity was actually in decline.

3. The enormous monetary expansion through deficit financing in the face of economic decline is also reflected in the change in the relative role of currency in circulation in the money supply. Table 26.3 shows that up until 1974 currency accounted for a declining share of the money supply; indeed this share declined much more rapidly than is typically the case in developing economies. Thereafter, however, the trend was reversed and currency in circulation assumed a progressively greater role again. In March 1979, currency in circulation made up 51% of the total Ugandan money supply; the corresponding figures in Kenya and Tanzania at this time were 28% and 36% respectively. By itself, such a trend could be interpreted as a gradual reversion back to the levels of development of ten years previously, and a relative decline in the importance of 'modern sector' activity. In the Ugandan context it also indicates the presence of substantial liquidity in the 'informal' or illegal sectors.

Table 26.1

Indicators of Monetary Expansion and the Role of the Bank of Uganda 1970-79

	<u>Dec. 1970</u>	<u>Dec. 1974</u>	<u>March 1979</u>
Government borrowing from the banking system as % of total domestic credit outstanding	39	65	72
Government borrowing from Bank of Uganda as % of total government borrowing from banking system	59	58	78
Government borrowing from Bank of Uganda as % of total domestic credit outstanding	23	37	56
Money supply (Dec. 1970 = 100)	100	272	707
Government borrowing from Bank of Uganda (Dec. 1970 = 100)	100	497	1921

Source: Calculated from data supplied by the Bank of Uganda.

Table 26.2

Monetary Survey, end March 1979 (preliminary)

	(Shs.m)
Foreign assets (net)	263.7
Monetary authorities (net) ¹	153.6
Commercial Banks (net)	110.1
Domestic credit (net)	11,463.2
Claims on Government (net)	8,257.2
Bank of Uganda	6,457.2
Commercial Banks	1,800.0
Claims on private sector ²	3,206.0
Money	7,807.6
Currency outside banking system	4,007.6
Demand deposits ³	3,800.0
Quasi-money ⁴	2,440.0
Other items (net)	1,479.3

Notes

- ¹ Includes Treasury foreign exchange holdings.
- ² Includes commercial bank loans to regional and local governments.
- ³ Includes demand deposits of regional and local governments with commercial banks.
- ⁴ Includes private sector deposits with Bank of Uganda.

Source: Bank of Uganda.

Table 26.3

Currency's Role in the Money Supply¹

	Dec. 1970	Dec. 1974	March 1979
Currency* as % of Money Supply	54	36	51
Currency* as % of Money plus Quasi-money Supply	36	28	39

Notes

¹ Figures from 1970 to 1973 are not strictly comparable with those from 1974 to 1979, but the differences are slight.

Source: Bank of Uganda

* Outside banking system (i.e. in circulation).

Source: Bank of Uganda

4. The banking system is also suffering from the consequences of a protracted period of indiscipline and mismanagement. Government pressure was exerted upon the wholly-owned banks (Uganda Commercial Bank - UCB - and the Uganda Development Bank - UDB) and the Cooperative Bank (owned by its 43 member unions) to extend advances to enterprises and for purposes which would not have met conventional tests of creditworthiness. On the declaration of the economic war (in 1972) all public and parastatal bodies receiving grants from the Government were directed to transfer their accounts from expatriate banks to the Uganda Commercial Bank. Most of these were already bad and doubtful accounts. By 1978 the total of loans which this Bank had been required to take up had risen to over Shs.600 m. and the General Manager protested that this huge accumulation of mostly irrecoverable debt was threatening the stability of the Bank. The Government's response was his arrest and removal from his post!

5. War damages and looting reduced further the financial viability of many debtors of the commercial banks. The departure of supporters of the military regime also created 'abandoned' advances which substantially exceeded their deposits (by about Shs.10 m.) in the cases of UCB and the Cooperative Bank. (This imbalance was not found with Barclays, Grindlays or Standard Banks). At the end of May, doubtful debts of the commercial banks made up over Shs.700 m. of their total claims on the nongovernmental sector of Shs.3,000 m. This probably unrecoverable debt was particularly concentrated in the UCB, which alone accounts for about 70% of the country's commercial bank business; UCB has estimated its size at as much as 35% of its total advances.

6. Some of this doubtful debt - about a third of it - is that of cooperative unions. The bulk of the remainder is the debt of parastatal bodies to which loans were made primarily by the UCB, as a result of government pressure or directives.

7. Similar problems of bad debt, resulting from governmental pressures, financial mismanagement and war/looting damage, afflict other financial institutions in Uganda. Particularly seriously affected was UDB which provides short, medium and long-term finances; and offers managerial and technical assistance for firms engaged in agricultural, industrial, housing, tourist and commercial development projects. UDB was used by the previous regime as a 'lender of first approach', being required to finance people totally without business experience whom the Government wished to assist. It has been obliged to lend to the parastatal bodies and Government Corporations into which the Government converted private businesses. Large sums have gone into Uganda Airlines, Uganda Sugar Company, the Uganda Times and Lake Victoria Bottling Company, into maize mills, oil mills, beach villas, produce marketing, and paper bag manufacture - often in the form of forced loans, some of which it will be impossible to recover in full. The Bank was sometimes required to finance the same enterprise over and over as the regime reallocated the business to a new operator. (Combined Paper Bags of Jinja has been re-allocated four times). At the end of April, 1979, the amount of indebtedness to the Bank was Shs.185 m. with Shs. 62 m. in arrears, some of which is owed by clients who have fled the country since the war began.

8. Seasonal crop finance has been provided to the cooperative unions and private processors principally by the Uganda Commercial Bank, which is best placed to provide it because of its network of upcountry branches. Other banks provided modest finance to particularly creditworthy unions or processors; and, in recent years, contributed to a governmentally administered and guaranteed crop financing fund which, particularly in the case of the cotton crop where processors' margins have been especially hard hit, spread bank risks while ensuring that crops were moved. Less creditworthy coffee processors (unions and private processors) were in recent years also financed - at subsidised rates of interest - by the Coffee Marketing Board out of its abundant boom-years liquidity. Even before the war and looting losses of 1979, many of the cooperative unions and private processors were in serious financial difficulty; and payments on crop finance loans were substantially in arrears. At present, the total bad debt of the cooperative unions appears to be in the order of Shs.400 m. - over Shs.200 m. to the commercial banks (mainly UCB with some to the Cooperative Bank), Shs.200 m. to the Coffee Marketing Board. At current prices, the average requirements of crop finance are about Shs.500 m. (The raising of grower prices would obviously increase this figure). The machinery of crop movement is at present clogged because of the shortage of the financial lubrication necessary for its smooth functioning. There is an urgent need to rebuild that part of the financial system that relates to cash crop finance.

The Task Ahead

9. It is impossible to exaggerate the importance of the banking system to the national

reconstruction effort. It will be the task of the system to provide the short and medium term finance which is needed for the revival of trade, restocking of retail stores, and re-equipment of workshops. They must have a major role in providing finance to agriculture both to rehabilitate the processing plants in the cooperative unions and for taking off the crops in coffee, cotton and tea. Long term finance for rebuilding commercial and residential property must ultimately come from insurance and housing companies but the initial finance to set rebuilding in motion must come from the banks. Management in the banking system seems to be fully aware of its responsibilities in this regard and ready to discharge them.

10. The new Government can scarcely devote resources to relieving the UCB or the UDB of the burden of the questionable loans which were made under pressure from the Amin regime. The solution to the banks' irrecoverable loan problems will therefore be a long-term affair extending beyond the rehabilitation period. What is not recovered will have to be written off against profit over a number of years. All of the bad debt of the UCB and the UDB however cannot legitimately be held against the banks which were required by the Government to undertake the loans. Some accommodation will have to be worked out as part of the entire reorganisation of the parastatal sector and its finances. For the present, a moratorium on this debt should be declared, while a special task force or commission begins work on the latter task. This debt must not be permitted to paralyse the lending activities of the relevant commercial banks (particularly the UCB) or, in consequence, to inhibit the basic economic activities conducted by other parastatal bodies and the private sector. Working capital is urgently needed for the activities of productive enterprises, and the commercial banks should be encouraged to provide it while at the same time imposing strict creditworthiness conditions and supervision. The Bank of Uganda should let it be known that this is the policy it favours, provide discounting facilities for the local bank-held government stock, and stand ready to offer further credit to the two troubled domestic banks if required. It should also consider the relaxation of its present controls over advances, and retreat for the present to a loan monitoring posture.

11. The UDB will have no prospects of profits, and hence no hope of survival, unless:-

- (a) it is immediately left free to apply independent banking judgments to new loan applications, and
- (b) it is supplied with additional funds in the shape of both equity and loan capital.

The Government should increase the paid up capital to the authorised limit in the coming year, and should try to negotiate external loan funds for the Bank from the IFC, IBRD or the African Development Bank. The UDB estimates that it can usefully employ about Shs.250 m. in the next two years. For the longer term, the possibility of establishing a Small Business Division of this Bank or a separate small business lending institution should be considered.

12. The commercial banks will happily provide current crop finance for those they believe to be creditworthy. Loan supervision would be substantially enhanced if only one bank were to engage in crop financing with each union, although this could sometimes result in more concentration of bank lending than is permitted under the Bank Act. The difficulty is that - even allowing for substantial diversions of the crop, analogous to those recently occurring in the direction of neighbouring countries, towards those buyers with money to pay for it - the total volume which can be handled by objectively creditworthy unions and processors falls far short of current productive capacity in the coffee sector (or potential capacity in cotton). The provision of supervised development finance for the rebuilding of the processors' vehicle fleet and facilities, would allow the problem to some extent, to solve itself. Crucial to such an 'automatic' solution, however, is a review of the size of the stipulated processor/cooperative margin. Its size should henceforth be determined according to a more flexible formula which takes into account individual differentials in transport and other input costs, and in expected throughput; it should not, however, be so closely related to these factors as to remove all incentives for productivity improvement. If it is politically necessary to retain a uniform grower price everywhere, the differences in margins should be absorbed at the Marketing Board level; it would otherwise be preferable to permit the grower price more accurately to reflect the cost of moving the crop from alternative locations and through alternative channels.

13. There remains the problem of the large 'overhang' of cooperative union bad debts, and the immediate needs of unions which could profitably handle the current crop (particularly if their margins were increased) but which are unlikely to attract commercial bank loans because of their heavy outstanding liabilities. It is important that this 'overhang' quickly be removed by the declaration of a payments moratorium (by the Government), pending a case-by-case review of the distribution of the burden of the required write off among banks, Government and debtors.
14. The Bank of Uganda should monitor the adequacy of crop finance. It should be prepared to discount Government bills or advance credit to the UCB or the Cooperative Bank for the purpose of crop finance, if it perceives that such finance is not forthcoming in adequate amounts.
15. The virtues of coordinated bank monitoring and supervision of individual borrowers are such that consideration should be given to the bringing together of crop and development financing functions within the Cooperative Bank. An externally financed cooperative assistance programme could then be channelled effectively through the latter Bank.
16. One constraint on the ability of the system to respond to the challenge will be a shortage of foreign exchange. Many of the expatriate banks have already come forward, we understand, with offers to the Government of loans in foreign exchange. We consider that expatriate banks can properly be required by the Government to supplement their offers by providing a supply of overseas credit to their own local customers during the period of reconstruction. The hard pressed reserves in the Bank of Uganda would thereby be provided some welcome relief. The lines of credit would no doubt have to revolve on a six-monthly basis, but extension of the credit for not less than two years is recommended. If an approach on these lines is made to each of the expatriate banks the response is likely to be favourable. The two non-bank credit institutions with external affiliations - Grindlays International and National Industrial Credit - which offer finance of a different type should be asked to do the same for their customers.

PUBLIC FINANCE

E. R. Richardson

Introduction

This report on public finance in Uganda is limited to the finances of the Central Government. It is presented in three parts. The first deals with the financial situation as it appeared during June of the financial year 1978/79. The second part is a note on the preparation of the Government's own budget for the new financial year. The third part is devoted to summary estimates of costs of the rehabilitation measures recommended by the Commonwealth Team and suggested sources of assistance towards the task for which the new Government has allowed itself two years.

FINANCIAL SITUATION AT JUNE, 1979

2. The new Government took office on the 11th of April, 1979. By established practice the financial year of the Government of Uganda runs from July to June. Less than two months was therefore available to the new Minister of Finance in which to take stock of the financial situation in the country and prepare a budget for the year 1979/80, the first year of that two year period.

3. What was the financial position disclosed by the books of the Central Government in the final month of the 1978/79 financial year? (Because communications with certain parts of the country were still disrupted, the position in regional and district administrations could not be taken into account.) The main picture was of an accumulation of short-term obligations measured in thousands of millions of shillings which dwarfed any short-term assets which might be in hand in the Treasury - deficits on both the recurrent and capital accounts of the central Government, foreign debt service payments in default, sums due to the Bank of Uganda in respect of foreign exchange obtained without local cover, and deposits for investment not yet invested.

Accumulated Deficits on Recurrent and Capital Accounts

4. The details of the financial picture were as follows:-

- (a) According to the printed Financial Statement issued by the Amin regime at the beginning of the financial year 1978/79, the accumulated deficits on recurrent and capital accounts would amount to Shs. 7,619 m. by the end of the year. As the end of the year drew near, Treasury officials were convinced that the debit balances would be much higher. Such debit balances have to be financed, however, by short-term borrowing either from the Central Bank, the banking system or the public, and the only such borrowings we were able to identify were -

Ways and means advances from the Bank of Uganda	Shs.5,275 m.
Treasury bills outstanding	<u>Shs. 998 m.</u>
Total	Shs.6,273 m.

Obviously, either some long-term borrowing had been overlooked or the actual deficits were somewhat less than the forecast.

- (b) Debt charge payments on certain loans had been in default, some since 1975. The defaults were of two kinds: payments not made by the Treasury (Shs. 136 m.), and amounts actually charged on the budget and paid over in shillings to the Central Bank but not transferred by the Bank because the foreign exchange was not available. After checking with the Bank, the Treasury gave the figure for these payments as Shs. 396 m.

- (c) Foreign exchange obtained without local cover. Beginning in June of 1975, various ministries had obtained advances of foreign exchange from the Central Bank to make payments overseas for which they had not supplied the equivalent amounts in shillings. By March, 1979, the total of such uncovered exchange withdrawals had reached Shs. 1,075 m., and the largest sums were received by the following:-

	<u>Shs. m.</u>
Ministry of Transport and Communications	448
Ministry of Finance and Planning	228
Ministry of Defence	192
Uganda Airlines	106
Ministry of Industry and Power	48

The repayments appear to have been made for a wide variety of purposes. They went to supply and procurement departments, aviation companies, motor manufacturers, schools of aeronautics, telecommunications equipment suppliers etc. Many of the payments, however, were remittances to Ugandan embassies and high commissions, with no name of an ultimate recipient appearing in the books of the Bank. On the 15th of March this year, the Bank began sending bills to the departments concerned, and Shs. 212 m. was repaid in the next three months. It can be assumed that departmental expenditure was increased in each case by the amount of the repayment, and so the overall deficit on recurrent account would not have been affected by the payment of Shs. 212 m. (For an indication of the state of the reserves in the Central Bank at about this time, see the papers on currency and the foreign exchange budget).

- (d) The Coffee and Cotton Price Assistance Funds. The balances in these two funds had remained in the books of the Treasury at Shs. 609 m. and Shs. 144 m. since August, 1978. They were deposits for investment. At the beginning of June, Shs. 609 m. from the Coffee Fund and Shs. 15 m. from the Cotton Fund remained un-invested.
- (e) Unspent Loan Balances. We were unable to discover what amounts from the long-term loans raised during the previous eight years might still remain unspent. Both the Treasury and the Bank of Uganda kept similar records of the amounts borrowed and repaid, and the Department of the Budget produced a statement which showed that Shs. 159.5 m. had been drawn on account of overseas loans between 1977 and 1979, but the relationship of the amounts taken on capital revenue and the expenditure on the projects for which the loan was raised in the first place needs to be more accurately recorded in future.

5. A schedule of the short-term indebtedness of the Central Government would therefore appear as shown below:-

	<u>Shs. m.</u>
Ways and means advances	5,275
Treasury bills outstanding	998
Debt charges unpaid by the Treasury	136
Local cover owing by various ministries to the Central Bank	<u>1,075</u>
Approximate amount of the Accumulated Deficits	7,484
Uninvested portion of the Coffee and Cotton Price Assistance Funds	<u>625</u>
	<u>8,109</u>

6. Parastatal obligations and commitments. We refer in other papers to the number of parastatal bodies which were in operation at the end of the previous regime. Some of these were major public enterprises reporting to various ministries, but not provided with appropriations in the Central Government's budget. The Uganda Posts and Telecommunications Corporation is an example. Set up in 1977 to take over Uganda's postal, telegraph and telephone services when the East African services ceased to be provided regionally, it took on heavy external obligations at its creation, and evidently exercises an independent authority to incur commitments in local and foreign currencies. Towards the end of May, it reported total borrowings (including interest) of Shs. 272 m. of which Shs. 145 m. appeared to be short-term in character, as well as overseas commitments on suppliers' contracts and other obligations to the equivalent of Shs. 101 m. It had embarked on a building programme which was likely to cost Shs. 247 m., had spent Shs. 75 m. on account of this programme, and owed Shs. 11 m. to foreign contractors for work already done. It possessed neither share nor working capital. The Uganda Railways Corporation is another such agency. It reported commitments of Shs. 994 m. but it has no outstanding obligations for work done but not paid for. So are Uganda Airlines and Radio Uganda. How many other parastatals might be in a situation similar to the Posts and Telecommunications Corporation we did not have time to find out. One assumes, however, from the number of parastatals in existence and the general view that most were dependent on the Government for financial support, that its total outstanding obligations were considerably larger than any sums which appeared in the Treasury books.

7. Guarantees by the Government. Certain contingent liabilities of the Government, not expected to become immediate claims on public funds, were also to be taken into account. Various banks and credit institutions had made loan and overdraft facilities available to parastatals and to companies partly owned by the Government, on the assurance of a government guarantee. According to lists prepared for us in the Ministry of Finance, on the 15th of June there were loans of DM 3.2 m., US\$ 675,000, £533,000, 928,000 units of account of the ADB and U. Shs. 175.4 m. outstanding under such guarantees. Estimates given by four of the commercial banks a week or two earlier however, indicated that their commitments to lending secured by guarantees from the Government were in excess of Shs. 449 m. Clearly, it is necessary to find out early what amounts are actually outstanding, say at 30th June, 1979, under authorised guarantees from the Government.

8. It would be hazardous to claim that the obligations mentioned above represent a complete list of the direct and contingent liabilities the Government might be called upon to meet at very short notice. In view of the conditions which prevailed in the final years of the Amin administration, it cannot be asserted that no other loans were unpaid or that no guarantees were given by ministries which do not appear in the records of the Ministry of Finance or the Treasury.

Recent Budgetary Out-turns

9. We tried to reconstruct the budgetary out-turns over the past six years, so as to see how such enormous deficits had been accumulated. The summarised result of this effort is set out in Table 27.1. It is clear from the table that the previous Government had pursued a consistent policy of deficit-budgeting throughout the period - enabled to do so only because of a compliant Central Bank's continuing supply of ways and means advances. It should be noted in this connection:-

that the Treasury bill limit has remained at Shs. 1,200 m. since 1973, and so the growth in the accumulated deficit was totally financed over these years by ways and means advances. The preference for advances from the Bank is probably explained by convenience and by the difference in interest cost - the interest on Treasury bills may be 6 or 6½%, on ways and means advances it is only 2½%.

Table 27.1

Budgetary Operations Of The Central Government
From 1972/73 to 1978/79

	1972/73	1973/74	(Shs.m.) 1974/75	1975/76	1976/77	1977/78	1978/79
Recurrent revenue		1324	2099	2244	5698	5177	2905
Recurrent and Consolidated Fund expenditure		2027	2429	2955	3681 (a)	3748 (a)	4131 (a)
Recurrent surplus (+) or deficit (-)		-703	-330	-731	+2017	+1429	-1226
Capital revenue		54	17	120	23	28	1145
Proceeds of loans						80	
Capital expenditure		635	832	826	1037 (a)	2044 (a)	1232 (a)
Capital surplus (+) or deficit (-)		-581	-815	-706	-1014	-1936	-87
Accumulated deficit at year end	-1405	-2689	-3834	-5271	-4268	-4775	-6088
Accumulated ways and means advances at year end	205						5275
Treasury bills outstanding at year end	1200						998
Difference							185

(a) Provisional results based on Exchequer issues, in some departments.

Source: Team computation from data in IMF report and supplied by Ugandan authorities

10. It will also be seen from Table 27.1:

- (a) that a short-lived rise in recurrent revenue between 1976 and 1978 encouraged the regime to increase its recurrent expenditure. By 1978/79 this expenditure has risen to a level quite beyond the capacity of the ordinary annual revenues to sustain; and
- (b) that although capital expenditure is quite properly financed with long-term borrowing, the military regime was apparently unable to cover much of its development programme in this way. A deficit was incurred on capital account in every year of the six, and it was not until 1978/79 that the proceeds of specific and additional taxes were allotted to the capital budget.

11. It follows from (a) above that the new Government will be obliged either to increase the recurrent revenues appreciably above the amounts received in 1978/79, or to bring recurrent votes down to about Shs. 3,500 m. a year. The unavoidable conclusion from (b) is that the very understandable desire on the part of the new Government to relieve the people's tax burden, cannot be indulged at present. All proposals to reduce the rates of the consumption duties that finance the capital budget will have to be received with caution and should be entertained only after business activity has revived and after the financing of the costly rehabilitation programme is assured.

12. The Accumulated Short-term Debt. We turn now to consider what the new Government might do about the legacy of short-term debt it inherited from the Amin regime. The Government cannot continue the practice of borrowing from the banking system. Moreover, as business activity revives and reconstruction gets under way, both public and banking response to new Treasury bill issues are likely to contract rather than expand. So the Government's room for financial manoeuvre is very restricted.

13. The ways and means advances cannot simply be written off. Yet little help with this burden can be expected from external aid donors, who will regard it as a purely domestic problem and capable of domestic solution. Reform of the currency could help reduce the weight of the debt without altering the amount of the advances, but, pending a decision on this wider issue, the Government should make a start on paying off the advances. Since the orthodox source of repayment is the proceeds of new long-term issues of Uganda stock, the market might be tested with a five and ten year public issue, with a reasonable coupon rate, at some time in the month of September.

14. The Government might then look around for assets which can be realised. An obvious possibility is the property of departed non-Ugandans which was vested in the state and placed in the charge of the Custodian Board. Its disposal, whatever the method adopted, should yield a surplus and the only prior claim against that surplus would be the old debts to the commercial banks.

Long Term Debt

15. Officials have expressed concern at the growth in long-term government debt, especially overseas debt, in the past eight years. As a percentage of annual government revenue, however, debt service charges at Shs. 586 m. (part of it incurred for supplies which would be private sector liabilities in other countries) are not high. (We comment further on debt charges in the following section).

THE BUDGET FOR 1979/80

16. We were afforded the opportunity to confer with officials of the Ministry of Finance as they worked on the preparation of the new budget, and found ourselves in broad agreement with the general lines on which it was being drawn up.

17. Two budgets for this year have been proposed by us - the first to be tabled before the end of June, and a supplementary budget, to be ready by September or October, which will embody the rehabilitation programme for 1979/80. Presumably, this supplementary budget will be based on priority suggestions by the Commonwealth Team. The Government should be able to present a coherent revenue component to that

supplementary budget, since the types and amounts of external aid which Uganda has received or may expect to receive this year should be known by them.

18. The first budget should be planned as a balanced budget. Expenditure should be kept within the limits of the revenue, recurrent and capital, already in sight, and only minimum provision should be made (in the capital budget) for rehabilitation expenditure. We are agreed that the motive power for that essential first push which is needed to start the engine of national recovery will come from expenditure outside the Government's budget. It is our unanimous opinion that the absolutely first requirement now is to have assured supplies of a small range of basic consumer goods quickly available in the shops and at reasonable prices. This must be done within the next few weeks. Production will begin with the farmer and the wage labourer. Until these two groups are able to reckon the value of new income in terms of the increased supplies of these basic goods it will buy at home, the incentive to resume producing and to leave off magendo activities will be absent. The Government urgently needs, therefore, an immediate infusion of foreign exchange, sufficient to pay for imported supplies of salt, sugar, soap, cooking oil, textiles and paraffin, which can be distributed either through parastatal or commercial channels or both.

19. What the first budget can and should ensure is that the essential first push does not falter after it starts. So its provision should aim at making sure

- that the governmental machinery is back in good working order - offices repaired and re-equipped and field staff mobile once more;
- that there are no transport bottlenecks, i.e. lorries are available to move spare parts and raw materials to the farms and factories and move produce from the farms.

20. Recurrent expenditure would accordingly be held within a maximum Shs.3,523 m., which is the estimate of the likely revenue for 1979/80, as reckoned by Treasury officials on the basis of existing rates of tax with minor adjustments. The estimate is up from Shs.2,905 m., the revised estimate for 1978/79, as the following figures show:

Recurrent revenue	1978/79 Revised (Shs.m.)	1979/80 Estimate (Shs.m.)
Income tax		
P.A.Y.E.	85	100
Business	210	240
Selective income levy	4	4
Export duties		
Coffee	1,200	1,069
Cotton	Nil	Nil
Hides and skins	Nil	Nil
Customs duty	250	310
Excise duty	80	200
Sales tax		
Imported goods	350	450
Locally produced goods	500	880
C.I.L.	22	20
Road licences	22	15
Driving permits	8	5
Freight charges	26	25
Stamp duty	4	4
Miscellaneous receipts	144	201
	<u>2,905</u>	<u>3,523</u>

21. The estimated receipts on capital account are Shs. 1,956 m. compared with Shs. 1,041 m. in 1978/79, as set out below:-

<u>Development Budget Revenue</u>		
	1978/79 Revised (Shs.m.)	1979/80 Estimate (Shs.m.)
Dividend and profits	41	146
Public sector investment contribution	1,000	1,500
Loans	-	310
	<u>1,041</u>	<u>1,956</u>

The effort should be made to keep the allocation for development (i.e. capital) expenditure within the amount of Shs. 1,956 m. plus any sums firmly promised by external donors before the date of presentation of the budget to the Council.

22. A few of the measures to be reflected in such a budget are indicated below.

Recurrent Revenue

The Coffee Export Tax: a reduction is proposed in the rate of the tax. This will facilitate increased prices to the farmer and small adjustments in margins to the processors, which we consider absolutely indispensable. The Team is convinced that without the proposed incentive changes, deliveries of coffee through official market channels will continue to decline and the diversion of supplies to unofficial buyers across the borders of the country will not cease. The consequences of a failure to attract coffee deliveries into official marketing agencies once more would be disastrous to the public revenue.

Recurrent Expenditure

Salaries: no provision should be made for increases in civil service pay at the present time.

Defence Vote: should provide for little more than the pay and allowances of personnel, including recruits and men engaged on security tasks. Equipment is regarded as a proper subject of bilateral aid and will be mentioned as such in our rehabilitation proposals.

Capital Expenditure

As many on-going projects and programmes as possible should be suspended. (It is hoped that reconstruction will begin soon enough to avoid aggravating unemployment). Capital votes should be applied primarily to the restoration of government administrative machinery - i.e. the repair of office buildings and houses and the replacement of furniture, transport vehicles and stores, and the provision of the tools and equipment needed to begin the reconstruction work.

23. Overview: A first budget of these modest and austere dimensions would represent an act of faith in the generosity of other countries which one hopes that later events will justify.

The Legal priority of Debt Charge payments

24. The pleasing facade of a budget in balance over a full year might mask problems of foreign exchange shortages related to the public debt which will reach critical proportions in the next few months, and the Government should decide early what it will do about them.

25. Two statements on public debt charges have been prepared in the Treasury:-

- (1) Local cover with the Bank of Uganda (i.e. payments made by the Treasury on public debt but held up by the Bank through shortage of foreign exchange reserves) Shs.336 m.
- (2) Statement of Foreign debt service payments overdue and unpaid at 30 June Shs.136 m.

Now public debt payments are by law automatic charges on the Consolidated Fund, and provision is being made under that section of the draft budget to meet the instalments of public debt charges which are due in 1979/80 (but not the outstandings). The total amount, according to the Treasury, is Shs.586 m. of which Shs.274 m. is due on overseas loans. (See the schedule of debt charges, external and local, in Table 27.2).

Table 27.2

Schedule of Debt Charges

A. On External Loans 1979/80 (Shs.m.)

Creditor	Principal	Interest and service chgs.	Total
UK	7.9	3.9	11.8
	2.3	1.5	3.8
	10.0	-	10.0
USA	2.5	1.7	4.2
USSR	37.2	15.0	52.0
China	7.3	-	7.3
Netherlands	1.3	0.5	1.8
Denmark	5.0		5.0
Saudi Arabia	21.3	3.1	24.4
United Arab Emirates		0.4	0.4
West Germany	11.3	4.5	15.8
Japan	3.3	2.0	5.3
India	3.9	0.5	4.4
Commonwealth Asst. Fund	2.1	1.2	3.3
IBRD	5.6	0.9	6.5
IDA	2.0	3.0	5.0
ADB	8.3	15.7	24.0
Arab League		0.4	0.4
Islamic Dev. Bank		0.1	0.1
Arab Bank for E.D. Africa		0.2	0.2
Suppliers Credits	52.1	15.1	67.2
Contractor Finance	12.5		12.5
Government Participation	7.2	1.0	8.2
Total External	203.2	70.4	273.6

B. On Local Loans (Shs.m.)

Creditor	Skg.Fund	Interest	Total
Interest on short term loans		97.0	97.0
" " tax reserve certs.		0.3	0.3
Uganda local loans	63.4	150.4	213.7
Gov. housing loans	0.7	0.3	1.0
Total Local	64.1	248.0	312.0
Total External and Local	267.3	318.4	585.6

26. If the present Government tries to meet the overdue amounts at (1) and (2) above, as well as those items in the Shs. 274 m. which will fall due in July, August and September, it will certainly further reduce its foreign exchange balances and aggravate the foreign exchange stringency in the first six months of the year. In the circumstances, the Government ought to consider an early appeal to its long-term government creditors (i.e. except the commercial suppliers and the international finance institutions) for temporary relief. It would announce an immediate moratorium on all foreign public debt payments, especially the overdue amounts inherited from the Amin regime, promise to resume payments by 1980 and undertake to confer with all its creditors about debt payments before the end of this calendar year.

27. In the meantime, it should use the interval - (a) to sort out the various obligations which were incurred by the Amin regime and (b) to consider in respect of Uganda's earlier obligations what reliefs it will ask for. As to debts incurred since 1972, chronological schedules of the loans obtained, classified by creditor, are available in the Treasury:

- (a) some are balances on the purchase price of foreign companies taken into government ownership by the previous regime. (Government might wish to return some of these to private ownership and recover the instalments paid);
- (b) others are due on large scale construction contracts (officials believe the terms were onerous) with transnational firms;
- (c) one loan from Saudi Arabia was reported to have been simply passed on intact to the Moslem Council;
- (d) in view of the purpose for which loans from other 'friendly' countries were used, it could be argued that the loans were of no benefit to the development of Uganda but rather personal assistance to the former President and therefore the lenders should not press for repayment.

28. As regards the debits incurred before 1972, Uganda as a 'least developed' and very seriously affected country is entitled to apply to its developed country creditors for relief from outstanding government-to-government loans. The major portion of Uganda's overseas debt falls into this category.

Taxation Policy

29. The preponderant position of the coffee export tax yield in total government revenues, and the vulnerability of this tax to events external to Uganda, raise issues of taxation policy, to which obviously the Government cannot address itself in the few weeks before the 1979/80 budget is brought out, but which it ought to take up very soon.

30. The Government has a clear interest in enlarging its revenue base and reducing its dependence on the export tax which is so directly affected by world market movements. Table 27.3, extracted from a recent paper by the Ugandan Commissioner of Taxation, shows the changes in the relative contributions by the major types of tax to the revenue of Uganda over the years 1971-4 and 1975-8. (The percentages changed somewhat in 1978/79, but seem likely to return to the 1977/78 pattern in the coming year).

31. Attention is invited to the dramatic change in the position of the income tax. If the revenues from the same major groups of taxes are examined in absolute rather than percentage terms, the Government will find that the present yield from the income taxes bears little relation to the rise in total disposable income in the country which has taken place since 1973. On the evidence, it appears that a major effort to equip the Income Tax Department, so that it can pursue the tax evaders and bring in the self-employed who make no returns, would produce substantial increases in the revenue from individual and corporate income taxes.

Table 27.3

Changes in the Relative Importance of Different
Taxes in the Period 1971-74 - 1975-78 (%s)

1971/72		1972/73		1973/74	
Income tax	22	Export tax	29	Export tax	26
Customs	18	Sales tax	18	Sales tax	21
Exports	18	Income tax	17	Customs tax	16
Sales tax	17	Excise	16	Excise	13
Excise tax	15	Customs	12	Income tax	13
Transfer tax	0.5	SIL	1	SBL	1.3
Development	0.4	Transfer tax	0.5	CTL	0.9
SIL	0.1	CTL	0.4	Transfer tax	0.8
				SIL	0.4
	91		93.9		92.4
	====		====		====
1975/76		1976/77		1977/78	
Export	34	Export tax	43	Export tax	57
Sales tax	28	Sales tax	31	Sales tax	20
Customs	14	Income tax	8	Customs	7.3
Income tax	9	Customs	6	Income tax	7.1
Excise	6	Excise	4	Excise	1.6
SIL	0.2	CTL	0.8	CTL	0.7
Transfer	0.1	SIL	0.3	SIL	0.2
CTL	0.1	Transfer tax	0.1		
	91.5		93.2		93.0
	====		====		====

SIL: Selected Income Levy

CTL: Commercial Transactions Levy

SBL: Special Business Levy

32. Another question of taxation policy - the possibility of capturing for the public revenue some of the economic rent that will accrue to private distributors of scarce goods is dealt with in the paper on foreign exchange policy.

THE REHABILITATION PROGRAMME

33. The programme on rehabilitation has been prepared by the Commonwealth Team after consultation with various officials of the Uganda Government and other representative Ugandans. It is presented for consideration by the Government of Uganda and by bilateral donor governments who might contemplate participation with the Government in the effort to restore the society, economy and administration of Uganda. It is assumed that an early meeting will be held between the Government and the donor countries and organisations, at which the need for assistance will be thoroughly ventilated. It will, of course, be the Government of Uganda's decision whether any particular measure will be carried out, and in this decision it will, no doubt, be influenced by the availability of offers of aid.

34. Financial schedules which show the cost of the programme, classified by sector, are given in the annexes attached to this paper, viz:¹

Annex	27.1	:	Agriculture (Schedule I)
"	27.2	:	Transport (Schedule II)
"	27.3	:	Communications (Schedule III)
"	27.4	:	Mining, engineering and chemical industries (Schedule IV)
"	27.5	:	Other manufacturing industry and tourism (Schedule V)
"	27.6	:	Social infrastructure (Schedule VI)
"	27.7	:	Finance and administration (Schedule VII)

35. The total financial requirements in each year are set out below.²

		(Shs. m.)			
		<u>1979-80</u>	<u>Recurrent</u>	<u>Capital</u>	<u>Total</u>
I	Agriculture		280	544	824
II	Transport (a)		2	746	748
III	Telecommunications (a)		41	399	440
IV	Mining, Engin. and Chemical Ind.		-	316	316
V	Other Industries and Tourism		-	638	638
VI	Social Infrastructure (Health, Education, Water, Housing)		150	1,894	2,044
VII	Administration and Finance		<u>70</u>	<u>824</u>	<u>894</u>
Total 1979-80			<u>543</u>	<u>5,361</u>	<u>5,904</u>
		<u>1980-81</u>			
I	Agriculture		346	419	765
II	Transport (a)		-	793	793
III	Telecommunications (a)		29	422	451
IV	Mining, Engin. and Chemical Ind.		50	224	274
V	Manufg. Industries and Tourism		-	403	403
VI	Social Infrastructure (Health, Education, Water, Housing)		175	1,874	2,049
VII	Administration, Finance		<u>36</u>	<u>800</u>	<u>836</u>
Total 1980-81			<u>636</u>	<u>4,935</u>	<u>5,571</u>

(a) Provision for railway signalling and telecommunications is made under transport, but the needs are described in the telecommunications sector paper (Paper 20).

1. In the case of social expenditures (education, health, housing, etc.), the foreign exchange element in these tables is the same as in the foreign exchange balance in Chapter 3, but imports in that table also include private sector imports (consumer goods, vehicles, etc.), and exclude, for example, the capital inflows shown in Schedule VII.

2. It should be noted that the provisions under Finance Annex 27.7 are only intended to be met by loans.

Defence

36. One major element in the rehabilitation of the country - defence - does not appear in our schedules. The proposed allocation for defence in the first budget does not provide for the equipment of the new armed forces (see paragraph 16). Little more than an embryo defence organisation is at present in existence, and no means of estimating equipment costs were available to us. We hope that some cooperating bilateral donor country, or countries, will offer to meet the Government of Uganda's urgent requirements of equipment for defence.

Capital Costs

37. The programme is primarily a programme of capital expenditure, but estimates of recurrent expenditure are provided in those sectors where it appears that the existing facilities will need to be supplemented or strengthened in order to ensure that the capital programme is completely effective.¹ The total capital expenditure including amounts to be made available through financial institutions is rather over Shs. 10,000 m.

38. With a few exceptions, we recommend that the practice of limiting external aid to the foreign exchange costs of a programme or project be varied in the case of the Ugandan Programme and that the local share of expenditure be permitted to qualify for aid. The logic of this is explained in Chapter 3 above.

39. The majority of the estimates reflect the judgement of the members of the Team as to costs: we have either carefully reviewed estimates we received or have drawn up our own detailed estimates. In a few cases (e.g. housing costs, clay and clay products industries) we have included, but do not necessarily endorse, the estimate of requirements submitted by the responsible officials. Under one or two items, our provision is a general allocation intended to meet expenditure which cannot be quantified at the moment, especially for 1980-81.² Our estimates only represent a rough first draft and the Government of Uganda will certainly wish to examine every estimate afresh before approving a programme for inclusion in its budget or making it the subject of an aid request.

Finance and Administration

40. The justification for most items in Schedules I to VI appear in the sector papers, but a word must be said about the schedule headed Finance and Administration. Three separate proposals for the provision of funds for local institutions have been made.

41. In the case of the Cooperative Bank, our proposal is that this institution be allowed to become the channel of all types of finance to its member unions and their associated institutions. The Bank's requirements of additional funds over the rehabilitation period are estimated at Shs. 400 m. We hope that some donor country having a specific interest in the development of cooperatives will undertake to supply on reasonable terms the new funds which the Cooperative Bank now requires. This Bank is not a government-owned institution. It is owned by its 43 cooperative unions which serve hundreds of cooperative farmers' associations. In the case of the Uganda Development Bank, it is assumed that the additional capital provided for in the schedule will be provided on loan, which will be negotiated between the Government of Uganda and international finance agencies, such as the African Development Bank and the IBRD. The Uganda Development Corporation appears to us likely to qualify for assistance from the IBRD on IDA terms. Bilateral assistance is not, however, ruled out. 'Other Agricultural Finance' provides for the farmers to be supplied through local banks and credit institutions.

42. Under 'Administration', provision is made to meet the local costs of the technical assistance personnel we suggest that the Government of Uganda should invite to assist with

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1. In some cases, it was difficult to separate local from foreign exchange spending, and recurrent from capital.
 2. In the case of some items in Schedules V, VI and VII, for which 1980-81 estimates were unavailable, it has been provisionally assumed that the expenditure will be roughly the same as in 1979-80.

the rehabilitation programme. The average local cost in each case has been estimated on the basis of existing practice in the Government of Uganda. It amounts to approximately Shs. 120,000 per person and covers housing, internal travel and subsistence plus the cost of supplying secretarial assistance and accommodation. Recruitment of about 540 such technical assistance personnel has been allowed for in the first year, 300 in the second.

Sources of Assistance

43. We suggest that donor governments should consider the possibility of 'adopting' particular items in the programme for which they would undertake to provide, either alone or in conjunction with another government or international finance agency, all the external aid required.

44. At first sight, it may seem strange to be proposing two separate meetings with donor countries and institutions to consider the Uganda rehabilitation programme. The fact is, we do not regard it as possible to convene a full meeting of all potential donors of project aid before late August or September. But the urgent need for assistance in the first six months of the rehabilitation period renders it impracticable to wait so long. It appears very desirable, therefore, that a smaller meeting of potential donors should be held not later than the end of July to consider the specific needs of the first six months, and to see what non-project help can be provided forthwith.

45. The Government of Uganda should regard the IBRD (through the IDA window) as a general source of assistance towards the implementation of the rehabilitation programme. A World Bank Mission should be invited early to visit Uganda and to consider in particular the possibilities of programme aid (for the second half of 1979/80, and for 1980/81) as well as project assistance.

46. Assistance on a project-by-project basis should be sought from both bilateral (Government) sources and from the multilateral finance agencies, as soon as a project - whether sub-sector, programme or the rehabilitation of an individual enterprise - is ready for submission. (The Government should invite help from the UNDP, E.A. Development Bank, ADB and IBRD in preparing project applications).

47. It will no doubt select the governments to be approached with particular projects. Governments whose industries have been traditional suppliers of equipment to the Ugandan ministries and agencies will no doubt expect to be approached with requests for project aid towards the programmes and projects in those ministries.

48. Where the Government prefers to place orders for equipment and services on the basis of competitive bidding, the funds should be sought from regional or international finance institutions - the ADB or the IBRD. Bank funds should normally be available to Uganda on IDA terms.

49. An agricultural project application to cover foodstuffs, minor crops, tobacco resuscitation and even irrigation should commend itself quite readily to the International Fund for Agricultural Development, if it can be shown that the benefits of the project will flow directly to the small farmer. Assistance from IFAD should be available on highly concessionary terms.

SCHEDULE I

Agriculture: Rehabilitation Expenditure (Shs.m)

Project/Programme	1979/80			1980/81			Remarks			
	Recurrent		Capital	Recurrent		Capital				
	For. Total Exch.	Local	For. Total Exch.	For. Total Exch.	Local	For. Total Exch.				
Major Export Crops	104	113	30	208	238	134	146	5	166	171
Livestock	114	129	1	13	14	21	154	1	13	19
Foodstuffs		10	33	109	142		10	32	72	104
Sugar		20	10	50	60		20	10	50	60
Small Industries		1		1	1	2	2		4	4
Research Extension and Planning	3	7	28	56	84	5	14	15	35	50
Special Projects	1	1	1	4	5			2	9	11
TOTAL	222	280	102	442	544	162	346	64	355	419

Transport: Rehabilitation Expenditure (Shs.m)

Project/Programme	Expenditure 1979/80			Expenditure 1980/81			After 1981		
	Recurrent	Capital		Recurrent	Capital			Remarks	
		For. Total Exch.	Local For. Total Exch.		For. Total Exch.	Local For. Total Exch.			
Railways Corporation	2	78	298	376		87	397	484	A private Co.
Road Network		35	90	125		10	80	90	
Uganda Transport Company		-	24	26		-	66	66	
People's Transport		-	17	17		-	9	9	
Uganda Co-op Trade Union		-	138	138		-	94	94	
Uganda Airlines		15	39	54		15	30	45	
Transport Unit Ministry of P&C		-	10	10		-	5	5	
TOTAL	2	128	616	746		112	681	793	

SCHEDULE III

Telecommunications Services: Rehabilitation Expenditure (Shs.m)

Project/Programme	Expenditure 1979/80		Expenditure 1980/81		Remarks
	Recurrent	Capital	Recurrent	Capital	
		Local For. Total Exch.		For. Total Exch.	
<u>Services</u> Postal and Telecoms.Corp. Broadcast Radio Air Navigation Services Meteorological Services	20	303	20	322	322
	3	10	1	21	21
	2	56	3	54	54
	16	30	5	25	25
	41	399	29	422	422
TOTAL					

SCHEDULE IV

Mining Engineering & Chemical Industries: Rehabilitation Expenditure (Shs.m)

Project/Programme	Expenditure 1979/80			Expenditure 1980/81			Remarks	
	Recurrent	Capital		Recurrent	Capital			
		For. Total Exch.	Local For. Total Exch.		For. Total Exch.	Local For. Total Exch.		
Minerals & Mining Engineering & Chemicals								
		33	150	183	50	28	114	142
			122	122		-	82	82
			11	11				
Total Engineering & Chemical			133	133				
TOTAL		33	283	316	50	28	196	224

SCHEDULE V

Other Manufacturing Industry and Tourism: Rehabilitation Expenditure (Shs.m)

Project/Programme	Expenditure 1979/80			Expenditure 1980/81			Remarks	
	Recurrent For. Total Exch.	Capital		Recurrent For. Total Exch.	Capital			
		Local	For. Total Exch.		Local	For. Total Exch.		
Textiles		24	123	147		1	22	23
Paper, Oil, Soap		1	54	55		-	33	33
Minor Industries		-	25	25		-	15	15
Wood Industries		76	29	105		6	2	8
Distillery		-	9	9		-	40	40
Tobacco		-	28	28		-	25	25
Building Materials		18	128	146		(18)	(128)	(146)
Other Industries		-	100	100		-	(100)	(100)
Tourism		10	13	23		-	(13)	(23)
TOTAL		129	509	638		25	378	403

SCHEDULE VI

Social Infrastructure: Rehabilitation Expenditure (Shs.m)

Project/Programme	Expenditure 1979/80			Expenditure 1980/81			Remarks	
	Recurrent	Capital		Recurrent	Capital			
		For. Total Exch.	Local For. Total Exch.		For. Total Exch.	Local For. Total Exch.		
Housing Education H Education L Health Water & Sewerage	150	273	891	1,164	224	732	976	
		75	102	177	125	150	275	
			80	80		200	200	
		40	266	306	(40)	(266)	(306)	
		57	110	167	30	87	117	
TOTAL	150	445	1,449	1,894	175	439	1,435	1,874

SCHEDULE VII

Finance and Administration: Rehabilitation Expenditure (Shs.m)

Project/Programme	Expenditure 1979/80				Expenditure 1980/81				Remarks	
	Recurrent		Capital		Recurrent		Capital			
	For. Total Exch.	Local For. Exch.	For. Total Exch.	Local For. Exch.	For. Total Exch.	Local For. Exch.	For. Total Exch.			
<u>FINANCE</u>									Average of 580 persons in 1979/80 and 300 in 1980/81	
B/Payments Supl. Financial & Devpt. Institutions										
1. Co-op Bank		50	150	200			50	150		200
2. Ug. Dev. Bank		100	150	250			(150)	(450)		(600)
3. Ug. Dev. Corp.			274	274			)	)		
Other Corp. Fin.			100	100						
<u>ADMINISTRATION</u>										
Local Costs of Tech. Asst. Personnel	70				36					
TOTAL	70	150	674	824	36		(200)	(600)	(800)	

FINANCIAL ADMINISTRATION

E.R. Richardson

Financial administration receives separate and particular attention in our Report because proper financial management is indispensable to good government everywhere, and because there seems to have been such deliberate and consistent deviation from its principles and practice during the period of the military regime.

Accountability and Parliamentary Control

2. This paper is not a legal examination of the situation in Uganda at the present time. It takes as given the provisions to the 1967 Constitution and the laws which have not been amended, subject to the proclamation made by ex-President Lule in the name of UNLF. Neither is it a report on a financial investigation, but merely an attempt to assist the new Government to assess its priorities.

3. The Public Finance Act, Cap. 149 of the laws of Uganda, enacted on the 9th October, 1962, provides for the control and management of the public finances of Uganda, for the audit of public accounts and of the accounts of statutory bodies and other matters.

4. Part II of that Act requires the Minister of Finance so to supervise the finances of the country as to ensure that full account is made to the National Assembly and that its financial control is maintained. The Minister is authorised to make regulations and issue instructions and directions, as he deems necessary, for the proper carrying out of the intent of the law. Such financial and accounting regulations, including instructions in regard to the custody of stores, have been issued - Accounting Regulations in 1963, Financial Regulations in 1968 and Regulations on the keeping of Stores in 1970. They are complete and detailed, and show little difference from those in regular use in the majority of former British colonies.

5. Part III of the Act lays down the duties and powers of the Controller and Auditor General (or Auditor General as he has been named since 1968), who acts on behalf of the National Assembly. All public accounts should be submitted to him for audit.

6. Whilst the Auditor General's Department appears to have operated under some indirect pressure throughout the period of the military regime, this official was not actually prevented from discharging the duties of his office, as they applied to the audit of the Government accounts. The result is that his successive annual reports on the public accounts of Uganda are a faithful chronicle of the conduct of public financial affairs during the eight years of the military regime. One need not delve deeper than his reports, therefore, (both on the accounts that were presented for his examination and those that were not) to find consistent evidence of gross mismanagement in the public finances of Uganda.

7. Now an indispensable element in the system of financial control laid down in laws like the Ugandan Finance Act is that the National Assembly should stand at the end of the chain of reporting, and that officials responsible for public revenue and expenditure should be always liable to be called to account before a standing Committee of Parliament for their management of public funds. In the case of Uganda the National Assembly was suspended as soon as the military regime took power, and the Public Accounts Committee followed the Assembly into suspension.

8. The regime prepared and published every year a budget with revenue and expenditure proposals. As this budget could not be presented to a National Assembly for approval, it represented no more than a statement of intentions of the President and his Cabinet. The Executive Authority was under no commitment to abide by the intentions stated in the budget. The President and Cabinet could freely change their minds.

9. Once or twice since 1972, proposals were advanced for setting up a new Public Accounts Committee apart from the National Assembly, but none of these proposals was followed through. No one in authority, least of all the President, appears to have shown any interest in the content of the reports by the Auditor General, and unfortunately nothing was done about the deficiencies in practice which he brought to attention.

10. Examples of the deficiencies exposed in these reports may be seen by the following extracts from the reports for the years indicated below:-

<u>Year 1972/73</u>	<u>Shs.m.</u>
Unvouched or incompletely vouched expenditure	93.7
Expenditure in excess of approved votes	0.1
Unauthorised expenditure (in 8 ministries)	0.02
Returns of arrears of revenue received: 1 out of 21 due	
Revenue uncollected	7.5
No books of account being kept by The Abandoned Property Custodian Board	
 <u>Year 1974/75</u>	
Bank reconciliation statements at the end of the year not rendered by 24 ministries	
Accounts of special funds not received - 31 (This compares with 18 in 1872/73, and 26 in 1973/74)	
Unvouched or improperly vouched expenditure	27.0
Expenditure in excess of approved votes	20.0
Losses of stores valued at	0.6
In overseas missions, misappropriation of funds; posting of abstracts and vote control books and deposits and advances ledgers 10 months in arrears	
In the Ministry of Agriculture, 29 dishonoured cheques valued at Shs.40,864, the majority being cheques drawn by public officers	
Purchases of tyres and tubes outside of Tender Board procedures	0.1
14 apparently fraudulent cash payments	0.9
 <u>Year 1975/76</u>	
Boards of Surveys on stores: 10 received out of 277 due	
Improperly vouched expenditure in 15 ministries	45.0
Balance on the purchase of an Embassy not accounted for and returned	0.9
Payments to private firms for repairs to government vehicles without authority or certificates	0.7
Subsidy payments to farmers who are ministry employees	0.06
 <u>Year 1976/77</u>	
Boards of Survey on cash and bank balances at the end of the year: Due: 337; received: 46, Number accompanied by bank reconciliation statements: none	
Overpayments of salary	0.3
Potentially fraudulent expenditure with mission or incomplete vouchers	15.1
Expenditure in excess of authority:-	
Office of the President	0.7
Ministry of Culture and Community Development	0.9

Year 1976/77 (contd/...)

	<u>Shs.m.</u>
Arrears of revenue - Office of the President	3.4
Rice bought for schools and unaccounted for - 300 bags valued at	0.4
Purchase by the Ministry of Defence of commodities from two suppliers with neither delivery notes nor ledger reference	2.4
value	

Central Book-keeping

11. Even more serious from another point of view was the Auditor's monotonous report each year, listing the accounts and statements required by Section 27 of the Finance Act which should have been presented by the Treasury for his examination but had not been so presented. Para 19 of the Report for 1976/77 is an eloquent example. It says:

- Accounts Submitted by the Treasury. In paragraph 20 of my last report, mention was made of the failure by the Treasury to submit for audit the undermentioned statements relating to the previous four consecutive financial years. The situation persisted during the year under review and I am not aware of the steps proposed to be taken towards rectifying the position. The statements in question are:

- Statement of Receipts into and Issues from Consolidated Funds*
- Balance Sheet of the Consolidated Fund*
- Balance Sheet of the Treasury General Account*
- Summary of the Appropriation Accounts
- Summary of Statements of Revenue*
- Summary of Statutory Expenditure Accounts
- Statement of Public Debt
- Statement of Contingent Liabilities
- Statement of Loans made by Government
- Statement of Subscriptions to International Organisations*
- Statement of Assets held in Development Banks

* Relates to 1972/73 only

Thus for the 5th year running, it has not been possible to publish Section 1 of the Public Accounts nor to compile the Out-Turn of Revenue and Expenditure, the Combined Budget Results and Public Debt or to extract the Surplus and Deficit, the General Revenue and Capital Development Accounts, all of which should normally be incorporated into or annexed to this report.

It should be borne in mind that the accounts and statements referred to here are the main public accounts of the Government of Uganda, required by law, and in the absence of which it is impossible to tell the true state of the country's financial affairs or to see what has been done with public revenues, expenditure and balances over the preceding period. The non-production of the summary accounts for 1972/73 is probably explained by the untimely removal of many finance officials of senior status and experience at the time when non-Ugandans were driven out of the country, but no satisfactory explanation appears to be forthcoming for the failure to produce the summary accounts and statements for subsequent years.

12. The question naturally arises: what steps were taken by the Minister of Finance and his deputies to see that the financial rules were complied with? A few appeals by letter were made to other ministries, but these were largely ignored and brought few results. Were no sanctions applied? It took some time to discover that the situation in Uganda during this period was not one in which financial officials had merely been delinquent in the discharge of their duties. The trouble was to be found in the highest circles of the Government. The Office of the President which should have been the centre of authority reinforcing respect for established financial procedures became, instead, the prime agent of disrespect for such procedures. The President's wishes could always be cited as authority enough for some proposed irregularity. Lip service only was paid by the Cabinet to the observance of financial rules.

13. Officials in the financial departments of the Government with some measure of defensiveness protest that no one who was remote from that financial scene could understand the general atmosphere of financial disorder, disregard for established regulations, undue preference, and open intimidation in which the business of the Government was carried on. This was, they say, a regime without law. The non-accounting for stores, procurement of supplies without Tender Board authority, expenditure in excess of approved votes and the refusal to keep proper records were all part of a system in which members of the Cabinet and those who had the favour of the President for the moment came to regard themselves as above both law and regulations. Officials who tried to resist the depredations on the public resources were jailed for obstruction or worse.

Foreign Exchange

14. As a resource in greatest scarcity, foreign exchange became the object of particular depredations by ministers and others in authority. A minister could call on the Bank of Uganda for advances of foreign exchange, indicating or not, as the occasion demanded, the purpose for which the exchange was required. He was not obliged to provide the local shillings in payment, but would get the exchange nevertheless. Ministers could place orders overseas for their pet projects and incur commitments against the budget and the country's foreign exchange resources, without either the knowledge or consent of the Treasury.

15. The Bank of Uganda looked to the Minister of Finance for instructions concerning drawings on the foreign exchange resources of the country. It carried out the Minister's instructions and it appears that other ministers were always able to obtain, if they chose, the consent of the Ministry of Finance to their drawings on the foreign exchange resources of the nation.

Parastatals

16. Such was the situation in the central Government. In Uganda, the area of governmental activity which is carried on through parastatal agencies is more extensive than any other country not formally recognised as having a 'centrally organised' economy. It is necessary, therefore, to examine also the state of financial administration in these agencies.

17. The name parastatal is applied in Uganda to two very different types of semi-government agency :

a) The first is the familiar government corporation, similar to those which many other countries have set up. It is established by an Act of Parliament (or Presidential Decree under the military regime) which defines its objectives, powers and resources and usually provides for specific financial control and accounting. Such Corporations are usually set up to pursue some governmental aim or provide some service which is thought to require operating flexibility and independent day-to-day decision-making power such as the central Government's departmental practices do not permit. The Bank of Uganda, the Uganda Commercial Bank, the Coffee and Lint Marketing Boards, the National Insurance and Housing Corporations and the Steel Corporation were parastatals of this first category. There were 11 such bodies set up between 1966 and 1974.

b) The other main category of parastatals was the former private businesses which the military Government decided to take into the public domain, the only reason for the decision to vest these businesses in government being their former ownership by non-Ugandans. There were 45 such companies taken over from departing Asians under Decrees Nos.29 and 32 of 1972, and 44 tea growing estates and other businesses from persons of British nationality under Decree No.11 of 1975. Developments were as follows:

- The Asian businesses were assigned to native Ugandans to manage, at first under the Uganda Development Corporation as their supervising manager. They were later removed, however, from supervision by the UDC and allocated in groups to various ministries of central Government for control and guidance. (For a list of these bodies according to their guiding ministries see Annex 8 to the paper on parastatals).

- Commercial banking finance did not always continue to be available to such businesses after their vesting in Government, and continued pressure had usually to be applied to the susceptible banks and credit institutions to supply them with working capital.

c) A further group of parastatals, similar in kind to the first group mentioned above, had to be established in 1976 and 1977 (when the East African Community appeared to be breaking up) to take care of those services which had been provided up to then on a regional basis. The Post and Telecommunications Corporation, the Uganda Railways Corporation, Uganda Airlines, the Harbour Services etc. are parastatal agencies of this third kind.

18. Officers of parastatal bodies would certainly appear to be 'entrusted with the receipt, custody and payment of public money and the custody of Government property' (in the language of the Finance Act). To what extent the procedures laid down in the Financial and Accounting Regulations apply to their accounts is, however, not quite clear. It can be argued that such an officer is not obliged to submit his accounts to the Auditor General for audit unless he is expressly directed so to do by the Secretary to the Treasury.

(The Accounts of the Bank of Uganda were removed from the schedule of the Auditor General after some awkward questions were asked by him and are now being audited by a private firm of Accountants).

19. Was financial control exercised within parastatal agencies? Again the report of the Auditors is a guide to the state of affairs :

e.g. The Coffee Marketing Board is a crucial agency in the management of the country's major export crop and the mobilisation of foreign exchange resources, yet year after year the private Auditor's report on the accounts of the Coffee Board carried the following significant and attention-demanding qualification:

- No quantity reconciliation of coffee movements during the year were prepared by the Board, as a result of which we have been unable to satisfy ourselves that all coffee purchased by the Board was accounted for.

And no action appears to have been taken by the authorities to whom these 'certified' accounts were presented every year.

20. A remoteness from Treasury and Finance Ministry control and the direct involvement of the Minister in their affairs seems to be the distinguishing feature of their financial administration :

- Each group of parastatals tended to acknowledge the financial authority only of its own Minister or Regional Governor. Attempts by the Ministry of Finance to call for financial statements from the smaller Agencies were met by frivolous excuses such as 'inability to find competent Accountants', in which the parastatal would be supported by its Minister.

- If the Minister concerned chose to apply enough pressure to his colleague, the Minister of Finance, he could always obtain a Government guarantee on behalf of any parastatal in respect of loans and overdrafts which banks and credit institutions had supplied to those agencies. Thus the inconvenience and the necessity to answer awkward questions which would be involved in an application to the Ministry of Finance for a direct loan or grant from the central Government budget, was avoided.

21. We recommend that the Ministry of Finance should call for early reports from all parastatal bodies on their present financial position, and insist on receiving details of their assets (including fixed investments) and liabilities, and on disclosure of all assumed obligations which may have to be discharged in foreign currency.

22. Where the Ministry of Finance is satisfied that a particular parastatal is unable to have a proper statement prepared, the Ministry should have the authority to select an accountant, and instruct him to examine the books (at the parastatal's expense) and prepare whatever statements and accounts are required.

23. Another form of control which the Minister of Finance should rigorously enforce in future is to call for regular reporting by both lenders (where possible) and borrowers on the sums which are actually outstanding from time to time on Government-guaranteed loans and overdrafts.

The Task Ahead

24. The most immediate and urgent task which confronts the new Government in the field of financial administration, is to separate itself completely from that pattern of financial management which characterised the military regime. This separation is essential in the interest of the public service, which confidently expects it. The separation is indispensable also in the interest of Uganda's external image and the need to ensure that the country reinstates itself in international opinion.

25. Dramatic new action should be taken by the Government to demonstrate to everyone that the era of gross financial mismanagement and corruption in Uganda has come to an end, and that a new era of probity, honest management of the public finances and strict observance of financial regulations has begun.

Policies and Resources Needed

26. It is recommended that the Government signal the change by another Proclamation or a formal Presidential Order, which should be issued as early as practicable in the new financial year.

27. The institutional modifications would be few. They would relate entirely to the role of the Consultative Council. An earlier statement intimated the Government's intention that the National Consultative Council should serve as a Parliament of Uganda until new elections are held. It should be made clear that the Council will approve the national budget which the Cabinet will present to the Council in the normal way.

28. The National Consultative Council should be invited to establish a Public Accounts Committee as a standing committee of the Council, appointed to receive accounts by Accounting Officers and to consider the reports and comments by the Auditor General on the accounts of public bodies. No minister or person with Executive authority should serve on this Committee of the Council. It could commence its work with the accounts for the year 1978/79.

29. As regards financial control in the Executive Branch, the Proclamation should reaffirm the validity of the Finance Act and emphasise the Government's firm intention to ensure that financial and accounting regulations are strictly observed in future.

Supervisory Powers of the Ministry of Finance

30. The full and complete authority of the Ministry of Finance should be confirmed over the management of all public funds and public property, including the collection and custody of public revenue, the raising of public loans and the creation of public obligations, the expenditure of public funds and the care and maintenance of public property. It should be emphasised that the Ministry of Finance exercises a supervisory function over other ministries and departments in matters relating to the public finances.

31. The civil service should be reminded that every public officer described in Section 4(1) of the Act has a duty to obey instructions of the Ministry. Civil servants should be assured at the same time, that ministers will not in future attempt to control or frustrate public officers in the discharge of their financial duties.

32. In order to ensure that particular attention is paid to financial administration from the very start of the rehabilitation period, we recommended that the Government of Uganda should select or designate or appoint a new senior official in the Ministry of Finance, not lower in status than Deputy Secretary of the Treasury who should be given full responsibility for the oversight of financial administration in the public service and parastatal bodies.

Note:

Governments which have experienced no deterioration of financial practice such as has occurred in Uganda have yet found it necessary to distinguish the function of financial supervision from that of central accounting for public expenditure, and to assign special staff in the Ministry of Finance for the supervision of financial management in ministries and departments.

Accounts in Arrears

35. All public accounts should be kept up to date in future. Where any ministry's or department's public accounts are in arrears or if books and statements have not been kept up to date, a proper complement of staff should be reserved for keeping current records and accounts so as to avoid any new fall into arrears. Other staff will be assigned to the duty of preparing overdue accounts and records.

Appointments

34. The present status of the super-scale posts in matters relating to appointments, promotions and dismissals should be reviewed. The recent experience in the country has dramatically shown what serious consequences can flow from the appointment to posts of Permanent Secretary and Accounting Officer of persons unqualified to fill them. The Presidency should divest itself of the direct power to make appointments to super-scale posts. All such posts, including that of Permanent Secretary should be filled in future on the recommendation of the Public Service Commission. The President could well retain, however, the power to assign Permanent Secretaries to the various ministries after appointment.

Special Tax Exemptions

35. All exemptions from internal taxes presently enjoyed by personnel of the Armed Forces should be abolished. It should be made clear that such facilities and pre-requisites as the Government intends personnel of the new Armed Forces to enjoy in future will take the form of specific allowances and will be provided for in the new Armed Forces Regulations.

Parastatals

36. The UNLF Government has announced its commitment to a mixed economy. Very different interpretations have been given to a similar commitment in different countries at different times. Our view is as follows:

i) We have suggested elsewhere that the new Government take immediate steps to make clear both to the public of Uganda and to potential investors from overseas precisely what its own commitment to a mixed economy involves. Private enterprise, both local and foreign, will wish to know how far the new Government will roll back the encroachment of the Amin regime on the private sector, and on what criteria it will determine the release of some of the present government-controlled businesses.

ii) In terms of financial control it should be made clear that the officers of parastatal bodies whether established by law or decree have a similar duty to those of public offices in regard to the management of public funds and are equally accountable to the Ministry of Finance and ultimately to the Consultative Council.

The Contribution of External Assistance

37. Very little external assistance is needed by Uganda in the area of financial administration:

i) Facilities might be offered by the Government to encourage former Senior Officials in financial departments who left Uganda in 1972 to rejoin the service. (It is understood that their Civil Service entitlements were never abrogated).

ii) For the first two years, it might also be necessary to call on some Commonwealth country to provide the Deputy Secretary of the Treasury for financial administration. Beyond this, only facilities for training of Audit and Treasury staff would be required. Other Commonwealth countries could be requested to take people for short periods into their Treasuries and Audit Departments. The Commonwealth Secretariat should consider organising a training course for auditors on Ugandan soil.

iii) Later in the reconstruction period, say during 1980/81, an experienced official should be engaged for the task of reviewing and updating the Financial and Accounting Regulations.

PUBLIC ADMINISTRATION (GENERAL)

Michael Bentil

INTRODUCTION

This paper deals with institutional and managerial problems related to the overall administration of the public services. Some of the issues discussed inter-connect with manpower problems which have been discussed in a separate paper.

2. The approach in this study has been to focus attention on the Key Staff Agencies that provide central guidelines and services, crucial to the effective integration and efficient functioning of the overall administrative machinery of the Government. They are those departments responsible for government-wide planning, coordination, control, administrative guidance, and general management support services. The principal offices include:

- the office of the President, responsible for the overall direction and coordination of public policies;
- the Ministry of Public Service and Cabinet Affairs and the Public Service Commission, responsible for establishment control and personnel administration in the 'traditional' civil service, which is composed of some 24 ministries and several government departments;
- the Ministry of Regional Administration responsible for the efficient and effective administration and management of local government services embracing four administrative regions composed of 23 districts and three sub-districts and a network of local authorities composed for the time being of 26 urban authorities, 130 counties, 620 sub-counties, 360 parishes and 6,590 sub-parishes. The Ministry's responsibilities include general guidance, regulatory functions, planning, financial control, personnel administration, staff training and control of purchasing and supply management in the local government administration;
- the Ministry of Planning and Economic Development, responsible for the overall coordination and integration of national economic planning. The Ministry's responsibilities include the appraisal of general economic conditions of the State; monitoring and evaluation of development projects; and the coordination and integration of economic resources including external technical aid;
- the Ministry of Finance, responsible for financial administration, budgetary control and accounting. Another important central responsibility of the Ministry is the control of government procurement planning, purchases, supplies, sales, and award of contracts, exercised through the Central Tender Board;
- Auditor General's Department, responsible for the audit of all public financial transactions and accounts. The Department's responsibilities include safeguarding the receipt, custody, issue and proper use of government property including stores and securities.

3. The separate papers on financial administration and manpower cover in some detail the major institutional problems of the Ministry of Finance and its constituent divisions, and of the Ministry of Public Service and Cabinet.

ROOTS OF CURRENT PROBLEMS

4. Besides its arduous task of rehabilitating the national economy destroyed during the military regime, the present Government of Uganda faces an equally difficult and uphill task of restoring the effectiveness of the administrative machinery of the public service which also suffered considerable damage during the regime. There were many reasons for this: abuse of authority; disregard for established rules and regulations, part of which remained out of date; organisational and physical problems; and brain drain.

5. The abuse of authority was characterised by the complete disregard for government standing orders, establishment and personnel rules and other administrative instructions authorised by law for regulating and controlling the administration of the public service. The system of management control and public accountability broke down completely, as the Head of Government, his ministers, regional governors and other high level power brokers chose to run the administrative system according to their personal wishes rather than in conformity with accepted practices and procedures. At the height of this system of personal rule, administrative irregularities became rampant and as a consequence, the level of productivity in the public service fell to a very low level.

6. In the establishments and personnel management area, the common experience was for the Head of State, ministers, regional commissioners, and other military ranking officers to side-step the Public Service Commission, as well as the Ministry of Public Service and Cabinet Affairs, and to appoint or dismiss public officials as they wished. Departments became over-established as 'outsiders' were appointed without authority; staff morale fell considerably as the outsiders appointed without authority were made to supersede serving officers who were better qualified; public servants were intimidated for refusing to subscribe to the malpractices of the military rulers. All these generated considerable apathy; many public servants, in the interest of self-preservation, chose to stand aloof and to look on while the system was fast deteriorating.

7. The state of the economy also produced many personnel problems that seriously affected the productive capacity of the public service. A number of public servants were forced to engage in secondary activities to earn extra money to supplement their salaries because of the extremely high cost of living.

8. In the area of financial administration, the experience was no better. The problems in this branch of the administration have been discussed in detail in the paper on financial administration as already pointed out, and therefore need no further elaboration. However, it is pertinent to observe that most of the irregularities in the financial systems including the breakdown in the system of public accountability stemmed from top level abuses.

9. In the procurement and supply management area, the incidence of administrative disorder also stemming from abuse of power and disregard for rules and regulations was equally significant. Ministries and departments side-stepped the Central Tender Board to procure their stores and equipment as well as negotiate contracts for services although the law required the prior approval of the Central Tender Board for (a) the purchase or sale of any government stores or equipment; or (b) entry into contracts for supplies or services or for building and civil engineering works; and (c) any other matter incidental thereto.

10. Another source of problems in the procurement area was that government organisations assumed direct responsibility for purchasing common-use items for which authority was vested in the following agencies:

- Supplies Division, Ministry of Works, in respect of catalogued standard building materials, general maintenance equipment, house-keeping tools etc.;

- Government Print Department in respect of stationery and printing sundries;
- Management Services Division, Ministry of Finance in respect of furniture and office mechanical aids.

11. Individual buying by the different departments undermined the possibility of materials standardisation; it led also to unnecessary duplications and overbuying of certain common items. By avoiding the central purchasing agencies, departments lost the advantage of the expertise that would have guided them in making suitable technical choices in their purchases and contract transactions. The result was the acquisition of materials of poor or the wrong quality. The unallocated stores system as a control and rational mechanism in supply management also became dysfunctional. Similarly, the protective storage in the unallocated stores became empty while some of the purchases procured directly by departments were either stolen or constantly exposed to deterioration due to poor storage.

12. Purchasing and supply management in the parastatal organisations and the local government administration was even more difficult to control due to worse cases of abuse of authority and disregard for stores regulations. Chief executives of public enterprises as well as regional commissioners were reported to have intimidated their subordinates in charge of stores and supplies and forced them to commit numerous illegal transactions. Their accountants were similarly intimidated.

13. Management improvement in the Government which aims at achieving effectiveness in administrative systems and procedures, proved difficult to attain. First the Management Service Division, the central agency responsible for Government-wide O and M and related management improvement work had been too long neglected in terms of staffing, as pointed out in the paper on manpower. In addition its responsibilities were misplaced; it hardly performed any meaningful management improvement work since its main attention had been focused on job evaluation and position grading work, which more appropriately is a Ministry of Public Service and Cabinet Affairs responsibility.

14. Long neglect leading to physical and material deterioration had also been a major cause of administrative ineffectiveness during the military regime. This was exacerbated by the liberation war which left behind considerable damage to property. The war effects included several physically damaged and looted public offices in a number of towns including Kampala and Entebbe, where most government offices are located. The offices concerned have become inoperable, and will take some time to be fully restored. Most of them are functioning with hardly any furniture, office equipment, stationery and other basic items necessary to sustain minimum operational efficiency. Also, getting to the office and back home have become a problem for the majority of public servants due to the breakdown both in the public transport system and the ability of the employing organisations to offer transportation. A substantial number of the official cars were either stolen or damaged during the war.

15. Most of the organisations with which the Commonwealth Team got in touch have requested the immediate restoration of their offices to a minimum level of operational effectiveness. Some of the items requested are listed in Annex 29.1 as an illustration. A comprehensive list is being compiled by the Manpower Public Service sub-committee of the Interministerial Liaison Committee for submission to the Government by the end of July, 1979.

TASK AHEAD

16. Rectifying the anomalies that have been identified requires a series of actions. There are some which require immediate action and others which could be delayed or phased over a longer period of time.

Immediate Action

17. This involves physical restorations which should be accomplished, as far as practicable, before the end of December, 1979. It embraces:

- (a) replacement of basic office equipment such as desks, tables, chairs, typewriters, filing cabinets, safes, stationery and other commonly used materials or equipment peculiar to individual organisations. A partial list of essential requirements is shown in Annex 29.1. It is understood that this need is being partially met by an indent for 900 typewriters which has been already placed by the Commissioner for Management Services. It is also learnt that the Government of Australia has promised some typewriters as an additional supply. The team was informed that tenders were being invited by the Government Printer for the supply of a limited quantity of stationery as a partial solution to the problem. The team was unable to obtain concrete information on action being taken on furniture;
- (b) repairs to damaged doors and windows to ensure security of public and personal property. The Buildings Division of the Ministry of Reconstruction and Rehabilitation claimed to be responsible for this work;
- (c) allocation of minibuses to assist in the transportation of public personnel on duty. A comprehensive list is being compiled by the Manpower and Public Service sub-committee for submission to the Government - Annex 29.1. Partially reflects this need;
- (d) restoration of staff morale and confidence destroyed during the eight years of misrule due to top level abuse of authority, intimidation of public servants and other irregularities previously mentioned. To achieve this would require concrete and convincing evidence of top level integrity, dedication to fair and impartial administration based on the principles of merit and respect for established regulations.

Delayed Action

18. This embraces action requiring gradual accomplishment over the two year period starting from July, 1979, through June 1981 and beyond. The main requirement is to provide for a stronger administrative infrastructure to support the effective execution of government programmes in the different departments, the functions, organisations, structures and administrative procedures of which would also have to be eventually reviewed and improved. The initial requirement would be to review the structure, staffing, institutional relationships and the system of operations of a selected number of functional departments/agencies responsible for central planning, coordinating, controlling, regulating and management services with the aim of making them operationally efficient and effective. The agencies to be covered would include:

- The Office of the President which is the Central Policy Coordinating Agency; the institutional relationships between this office and the Ministry of Public Service and Cabinet Affairs in regard to personnel management in the civil service need redefinition. In the absence of a Secretary to the Cabinet with whom the Commonwealth Team could have discussed this subject, this part of the study remained inconclusive.

- The Ministry of Public Service and Cabinet Affairs, the Public Service Commission and the Management Services Division which are the key control organisations responsible for the personnel and general management improvement of the public service; the weakness in the central machinery for personnel management has been discussed in detail in the paper on manpower.
- The Budget Division, the Treasury and the Data Processing Division of the Ministry of Finance and also the Auditor General's Department from the point of view of financial control, management accounting, and management infrastructure support; the paper on financial administration has covered these agencies and their functions in detail. However, it is stressed that special attention should be focused on increasing accounting capability in the Government as a whole through extensive staff training to cover both departmental financial staff, and Treasury and Audit staff.
- The Ministry of Planning and Economic Development, in regard to its special responsibilities for (a) the development strategy; (b) coordination of external aid and technical assistance and (c) manpower planning.
- The Central Tender Board and associated agencies responsible for the central procurement planning, materials standardisation and control of purchasing and supplies activities. The Agencies concerned include the Supply Division of the Ministry of Reconstruction and Rehabilitation, Government Printing Department and Management Services Division. There is the urgent need to improve the structure, staffing and methods of operation of these agencies as well as redefine their role in relation to procurement and supplies policies and their execution.
- Management improvement expertise at departmental level; this should be fostered through the training of departmental managers and supervisors to acquire working knowledge of basic O and M and other related management improvement techniques.

Planning and Coordination Responsibilities

19. The complex and diversified needs of the national rehabilitation programme demand strengthened planning and coordination capabilities in the Government in order to maximise the use of resources which are extremely limited. For example, there is the need for well integrated development strategies, proper manpower planning, effective coordination of external aid and technical coordination.

20. At present the Ministry of Planning and Economic Development is mainly concerned with project evaluation and preparing papers on the current economic situation. Development Planning naturally has had a low priority. However, when rehabilitation needs have been met, and the main economic distortions have been corrected, the Government will naturally want to evolve a dynamic machinery for preparing and updating its development strategies. Helping in this task would be one of the main tasks of this Ministry.

21. A crucial point is that development planning is useless if (as is so often the case), it means retiring from routine work for several months and producing a published Plan showing projections of investment and output. A set of projections may be useful

for ensuring consistency between departmental targets and there may be political advantage in publishing these. But these are purely subsidiary activities. To help the Government formulate a long-term strategy and implement it means acting like a 'think-tank', being in day-to-day touch with ministers taking decisions that affect the pattern of development. These are not only, or even mainly, decisions about investment; decisions on wages, exchange rates, producer prices, transport systems, the scale and content of education etc. also determine a country's development. Briefing ministers on the implications of these is far more important than publishing 'Plans' which usually soon become out-of-date.

22. There are various mechanisms for meeting the above requirements. For example, special Cabinet sessions on papers prepared by the Ministry of Planning inter-ministerial committees, and planning units in various departments reporting to the Ministry; but none of these works unless the political leadership feels the need for a coherent development strategy.

23. The gradually increasing importance of development strategy needs to be anticipated early in the rehabilitation period. Its statistical requirements are dealt with in the paper on statistics. But in addition, towards the end of the year, a team should be formed and given the task of preparing basic papers on development options, covering both social and economic aspects, as a run-in to the task of planning. This can and should be done by Ugandans - no external assistance is needed, though training periods overseas at suitable centres would help in this period of preparation.

24. Also, the role of the Ministry of Planning and Economic Development as the central agency for coordinating and regulating external aid and technical assistance is expected to expand tremendously and become most complex during and after the period of rehabilitation when the Government expects to receive assistance from several international and bilateral donor organisations. Currently, this responsibility is exercised by an inter-ministerial committee chaired by the Permanent Secretary, Ministry of Finance. The Committee is serviced by the Ministry of Planning and Economic Development through a small secretariat staffed by five officers. The present arrangements need improvement.

25. It is recommended that the Committee meets as frequently as possible to review and up-date its rules and procedures for negotiating, vetting, coordinating and utilising foreign aid and technical assistance. It is further recommended that the secretariat which services it be re-constituted into a permanent department suitably enlarged and be recognised as the main liaison between the Government and representatives of donor countries and international organisations.

26. The membership of the Inter-ministerial Technical Coordination Committee (see preface) may be also re-constituted to include the following core members: Permanent Secretaries, Planning and Economic Development; Finance; Foreign Affairs; Public Service (Establishments); Education; Reconstruction and Rehabilitation; Agriculture and Commerce.

POLICIES AND RESOURCES

Policies

27. The initial policy action towards the accomplishment of the tasks identified would be for the Government to issue a statement to be amended from time to time as necessary which clearly defines the powers, responsibilities and functions of the various ministries and larger departments as well as the institutional relationships among them. This action would assist public servants to better understand their responsibilities within the Government. It would also provide a general guide to the public, and assist them in their dealings with the Government as a body and its various agencies.

28. The second major policy would be to appoint a permanent Administrative Reform Commission to be responsible for the continuing review of the overall administrative system of Government, and to put forward proposals for improving the efficiency and effectiveness of the public services. The reform should focus attention on strengthening the capabilities of government at different levels and in different sectors, in planning, financial control, management improvement, personnel management, procurement planning and purchasing and supply management.

29. The membership of the proposed Administrative Reform Commission may not exceed 10 persons, and should be drawn from specialists with background in any or a combination of the following subject areas.

- Machinery of government policy analysis and government organisation planning
- Development planning and project management
- Administrative rules and regulations
- Public finance and accounting
- Auditing and management control
- Management systems analysis
- Training and staff development
- Purchasing and materials management
- Information management and data processing

Resources

30. Two sources of inputs are needed to implement the policies to be initiated. The Government of Uganda would be expected to provide the initial inputs. But some external assistance may be needed in order to assist the proposed Commission to carry out its work. The allocation of contributions in terms of manpower are expected roughly to be as follows:-

(a) GOVERNMENT OF UGANDA INPUTS

- Appointment of a Minister of Public Service and Cabinet Affairs who will provide a direct link between the Cabinet and the proposed Administrative Reform Commission and also secure for the Commission, the necessary political support. The post of Minister of Public Service and Cabinet Affairs was vacant during the mission of the Commonwealth Team. The post was established by the Public Service Act of 1969.
- Appointment of members of the proposed Administrative Reform Commission. It has been proposed that the membership should not exceed 10 officials.
- Allocation of secretariat support to the Commission. It is suggested that the Ministry of Public Service and Cabinet Affairs should provide the required services.

(b) EXTERNAL ASSISTANCE INPUTS

- Seven experts specialised in the different fields of administrative reform as specified above to assist set up and 'run-in' the proposed Administrative Reform Commission for an initial period of one year, commencing from about January 1980.

31. The other major input would be for the President to invite his cabinet ministers and top public service advisors comprised principally of permanent secretaries to a half-day Round Table Conference to exchange ideas on the challenges of reconstruction and rehabilitation and to consider possible alternative strategies for coping with some of the problems to be identified as major hindrances to effective public administration. The conclusions of this Conference may be made available as a guide to the proposed Administrative Reform Commission. A suitable time for this Conference would be between now and December, 1979.

32. It is further suggested that the Minister for Public Services and Cabinet Affairs be made responsible for preparing the programme for the Conference with the assistance of the Vice-Chancellor, Makerere University. It is also recommended that the principal speakers at the Conference may include at least one expert from abroad who is eminently conversant with the peculiarities of government of machinery and public institution building in developing countries, as well as problems of development administration. The Executive Secretary of the UN Economic Commission for Africa

would seem to be a well-suited person for this highly responsible assignment.

33. It is expected that the proposed Conference would strengthen the rapport between the Government policy makers and their advisers and also serve as a morale booster in the Ugandan Public Service as a whole. In this context, each Minister may wish to arrange a similar Conference with his heads of departments, and other top executives within his portfolio.

Partial Assessment of Immediate Office Equipment and Supplies Needs of Ministries and Government Departments

Min./Dept.	Division	Type- writer	Dupl. Mach.	Photo Cop.Ma.	Filing Cabinets	Desks	Tables	Chairs	Stencil Papers (Reams)	Carbon Papers (Reams)	Typing Papers (Reams)	File Covers (Pockets)	Dupl. Paper (Reams)	Acct.& Add.Mach.	Fans	Bicy- cles
1. Justice	All Divisions	88	3	1	119	100	107	358	206	920	97000	4050	-	13	-	-
	Judiciary & NT	161	22	11	110	-	312	595	200	200	20000	1500	-	33	-	-
2. Prisons	HQ	17	1	-	5	4	5	160	40	10	100	200	100	8	20	-
3. Information & N.G.	All Divisions	51	8	2	40	22	52	313	910	100	370	100	2400	-	-	-
4. National Recon. & Rehab.	All Divisions	53	4	2	115	85	80	115	530	7300	7300	5600	-	-	-	-
5. Labour	Social Security	45	13	1	102	55	123	663	30	40	150	1000	104	-	-	-
6. For. Affairs	HQ	12	-	-	13	9	13	31	85	50	2000	3000	-	2	-	2
7. Education	All Div. & Schools	324	6	8	328	13815	634	513	617	209	2428	714	-	-	-	-
8. Public Service	IPA	11	2	2	10	10	10	30	65	150	65	300	300	3	50	3
	HQ & PSC	27	2	3	28	53	23	137	450	260	1000	1000	600	8	-	-
9. Defence	HQ	27	4	114	-	-	-	-	300	-	-	-	-	26	-	-
10. Animal Resources	Fisheries	26	5	1	29	21	20	46	60	28	54	1700	-	20	-	-
	HQ & up country	60	5	2	50	100	50	200	200	300	400	200	-	50	-	-
11. Health	HQ & up country	165	53	8	250	130	311	2273	550	550	550	2500	-	-	-	-
12. Planning & Ec. Dev.	All Departments	9	2	2	14	26	17	55	35	9	20	200	-	-	-	-
13. Tourism & Wild Life	Game	7	11	11	53	50	66	95	60	66	93	530	-	120	-	-
14. Agriculture & Forestry	HQ	171	86	62	469	311	325	1651	1728	949	1494	8020	-	61	-	830
	Forestry	48	32	6	400	-	-	13	41	1300	4300	2108	-	-	-	-
15. Lands & Surveys	Water Develop.	26	3	2	24	6	95	284	100	50	250	1000	-	20	-	-
	Geological	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-
16. Education	Tech. Institutes	60	30	15	150	100	60	200	3000	7560	7500	15000	15000	33	-	-
	Sec. Schools	120	120	100	120	100	100	600	6000	600	3000	12000	-	-	-	-
	ITC	50	33	33	200	4000	800	6000	4000	100	300	8500	140	-	-	-
	Primary Schools	3500	1000	300	5000	1000	4000	2400	2500	15000	15000	50000	-	-	-	-
	National Curv.DC	15	5	3	50	40	20	100	500	200	500	500	100	268	-	-
17. Internal Affairs	All Departments	9	4	1	29	13	28	70	34	44	90	29	-	387	-	-
18. Cooperative & Mktg.	HQ, Unions & Soc.	131	8	4	163	310	10	1255	-	-	-	-	-	-	-	-
19. President's Office	Printing	10	2	1	25	20	-	-	-	-	-	-	-	-	-	-
20. Regional Admin.	All Divisions	876	75	72	1030	798	310	3231	-	-	-	-	-	-	-	-

Indicative List of Departmental Technical Equipment and Miscellaneous Supplies Needs

No.	Ministry/Department	Description of Requirement	Quantity or Value
1.	<u>Public Service</u>		
	(a) Headquarters	Staff Cars	3) Details with the
	(b) IPA	- do -	2) Manpower & Public
		Minibus	1) Service Sub-
	(c) PSC	Staff Car	1) Committee
2.	<u>Ministry of Health</u>		
	All Divisions	Office Furniture	-do-
3.	<u>Ministry of Education</u>		
	Technical Schools	(a) Carpentry & joinery tools)	
		(b) Fitter machinist tools)	
		(c) Plumbing tools)	
		(d) Electrical)	-do-
		(e) Blocklaying tools)	
		(f) Pointing & decorating tools)	
		(g) Mechanical tools)	
4.	<u>Lands and Surveys</u>		
	Geological Surveys and Mines	(a) Chemicals)	
		(b) Laboratory Equipment)	
		(c) Office Stationery and Equipment)	-do-
5.	<u>Ministry of Cooperatives and Marketing</u>		
	(a) Headquarters	(a) Lorries)	
	(b) Unions	(b) Cars)	
	(c) Cooperatives	(c) Iron Sheets)	
		(d) Coffee Hullers)	-do-
		(e) Land Rovers)	
		(f) Tarpaulins)	
6.	<u>Ministry of National Reconstruction and Rehabilitation</u>	(a) Lorries)	
		(b) Tippers)	
		(c) Land Rovers)	
		(d) Construction Equipment)	-do-
		(e) Septic Tank Emptiers & Rehabilitation)	
		(f) Pick-ups)	
		(g) Office Furniture & Equipment)	
7.	<u>Office of the President</u>		
	Printing	(a) Printing Equipment)	
		(b) Engineering Workshop Equipment)	-do-
8.	<u>Ministry of National Resources</u>		
	Fisheries	(a) Marine Engines & Spares)	
		(b) Gillnets)	
		(c) Textbooks on Fishing Technology)	-do-
		(d) Marine Workshops)	

No.	Ministry/Department	Description of Requirement	Quantity or Value
9.	<u>Ministry of Provincial Administration</u>		
	(a) Field Administration Service	(a) Furniture and Equipment)	Details with the Manpower & Public Service Sub-Committee
	(b) Inspectorate Sections	(b) Stationery)	
	(c) Urban Authorities	(c) Ambulances)	
	(d) Headquarters	(d) Tippers and other Vehicles)	
	(e) Town & Regional Planning	(e) Battery Chargers)	
		(f) Technical/Productive Requirements)	

MANPOWER

Michael Bentil

General Overview

1. Uganda, like several other developing countries in Africa, suffers from a perennial shortage of high level skilled manpower. This has been a major impediment retarding economic and social development. The problem has become more acute in Uganda as a result of an unprecedented rate of Ugandanisation of the economy, precipitated by the declaration of the so-called economic war in 1972. This declaration generated the mass exodus of non-citizens, as well as citizens of Asian origin who for a long time dominated the technical and managerial positions in the different sectors of the economy.

2. The problem of technical and managerial personnel shortage has been persisting for some time. According to a manpower survey undertaken and published by the Ministry of Planning and Economic Development in 1967, it was revealed that as many as 74% of professionals were non-Ugandans. The survey also revealed that the number of people holding positions for which they were not theoretically qualified was far too large in the higher technician group, where a minimum of High School Certificate plus at least 6 months of formal or practical training is required. The posts found to be difficult to fill included those for top management personnel, engineers, accountants, foremen, and mechanics.

3. As a remedial action, the 1967 Survey proposed an expansion in the educational system that would provide for trained manpower necessary for rapid economic development. By the same token the Survey recommended the creation of a Manpower Planning Board to strengthen and broaden the capacity of the Manpower Planning Sector of the Ministry of Planning and Economic Development. The membership of the Board as then recommended was to have consisted of institutions and individuals most concerned with overall manpower, employment, education, and training problems both in the Government and in the private sectors.

4. The situation as revealed by the 1967 Manpower Survey remained unchanged and seemed to have deteriorated during the military regime. The Manpower Planning Board that has been proposed by the 1967 Survey was never established.

5. Another manpower survey undertaken by the Ministry of Planning and Economic Development with the assistance of UNDP/ILO in 1977, but not published, also drew attention to the need for a collective approach to manpower planning, and proposed the creation of a National Manpower Advisory Committee. It was intended that the Committee would advise, *inter alia* on manpower work programme priorities which would include sectoral studies of manpower requirements, study of critical shortage occupations, assessment of bottleneck areas in the educational and training systems, and periodic salaries reviews. As mentioned before, no such body was established by the military government despite its potential usefulness.

6. The 1977 survey, as the one before it, also high-lighted the shortage of professional manpower. It further revealed that the shortage had been compounded by the inappropriate utilisation of the relevant skills available. Most of the professionals were working at less than their full capacity due to the shortage of supporting technical personnel. For example, the ratio of technicians to engineers was estimated to be 3.3 : 1. The survey therefore stressed, as the 1967 survey did, the need to give the highest priority to training, especially to cover middle-level manpower.

7. Before the 1976 Manpower Survey took place, a Government Commission undertook a comprehensive review of public service salaries during 1973 and 1974 and also emphasised the need for strengthened training. It pointed to the shortcomings that had reduced the effectiveness of training in the public service, with the following effects:

- inability of the Training Division of the Ministry of Public Service and Cabinet Affairs, due to lack of authority and inadequate staffing, effectively to exercise its responsibility as the central institution for overseeing training in the civil service;
- departmental training institutions were staffed with tutors who lacked training or relevant background in teaching; in addition, no central arrangements existed for their training;
- little or no effort existed to coordinate, control and provide guidance from the centre to the various departmental training institutions. Equally there has been no particular body at the national level to monitor the dispersed different training institutions in order to ensure that their objectives were being achieved;
- in the parastatal and private sectors, only a few organisations had carefully worked out training programmes; also there was hardly any coordination with the training programmes of the Central Government.

8. Arising from the need to coordinate the training effort in the Government, the Public Service Salaries Review Commission of 1973/74 recommended that a National Training Council be established within the Ministry of Planning and Economic Development to perform a number of functions including particularly the following:-

- to advise or determine a central training policy;
- to coordinate the use of training resources;
- to encourage an interchange of tutors among training institutions;
- to ensure maximum utilisation of training institutions and facilities;
- to ensure that training institutions are staffed with adequately qualified and experienced teachers;
- to ensure that the objectives of government sponsored programmes are relevant to the needs of Uganda.

9. The commission also recommended that the existing training institutions responsible for different forms of professional, technical and managerial training should be helped to strengthen their programmes. The institutions concerned included Makerere University and its specialised institutes; the Institute of Public Administration; Management Training and Advisory Centre; National Teachers' College, Kyambogo; Uganda Technical College; Uganda College of Commerce; and Departmental Training Institutions. The Departmental Training Institutions include: the Bukalasa Agricultural Institute, Arapai Agricultural College, Nybyeya Forestry College, National (Agricultural) Mechanisation College, Kigumba Training College, Entebbe Veterinary Training Institute, Fisheries Training Institute, Nakawa Vocational Training Centre, Medical Assistants' Training Schools, School of Hygiene, Nurses and Midwives Tutor Training School, and Road School.

10. Despite the marked interest in professional and technical training, as well as the repeated attention drawn to it by different Manpower Surveys and similar bodies, the military government failed to make sufficient provision to enable the existing educational and training institutions to strengthen and expand their programmes. Equally, Government did not encourage the creation of new ones nor was it interested in planned or existing staff development programmes.

Study Approach

11. Attention in this paper has been focused on public sector employment due to the lack of data regarding private sector employment. The limited time available for the study in relation to the volume of work involved has been another reason for limiting the study to the public sector. Notwithstanding this limitation, public sector employment was seen to be sufficiently representative of the manpower intensity in the entire economy. For example, according to data collected from the Statistics Division of the Ministry of Planning and Economic Development which are summarised in Table 30.1, public sector employment was 56% of total employment in Uganda at the end of December 1977. The remaining 44% was private sector employment.

Table 30.1
Share of Public Sector in Employment in Uganda

	1970	(%)	1972	(%)	1973	(%)	1975	(%)	1977	(%)
Private	184,037	(59)	180,663	(55)	166,086	(47)	163,061	(44)	161,056	(44)
Public	128,815	(41)	149,105	(45)	183,975	(53)	204,599	(56)	206,566	(56)
Total	312,852	(100)	329,768	(100)	350,061	(100)	367,660	(100)	367,622	(100)

Source: Statistical Division, Ministry of Planning and Economic Development, Kampala - May 1979

12. For ease of analysis, public sector manpower problems and needs have been examined under four separate employment sub-sectors in the government as follows:-

- The regular civil service composed of the traditional government ministries and departments embracing a staff of nearly 69,000 of January 1979. The police and prison establishments, accounting for a staff of about 20,000 and appearing in some records as part of the civil service, have not been included in this study.
- The teaching service composed of primary schools, secondary schools, teachers' college and technical schools and institutes, and employing a staff of about 52,000.
- District administrations and urban authorities employing a staff of nearly 54,100.
- Parastatal organisations - public enterprises and corporations - employing a staff totalling approximately 80,000.

13. Also, analysis under each of the four sub-sectors was focused on three occupational groups considered crucial to the national reconstruction and rehabilitation programme:-

- Managerial and administrative cadres which include posts ranging down from top executive posts such as managing directors, permanent secretaries to the level of assistant managers.
- Professional posts for which special high level academic qualifications are required. These are considered to be most critical during the period of reconstruction.
- Semi-professional and technical cadres which provide skilled and direct support to the professional cadres and cover those posts which require technical training at recognised technical training and educational institutions. This group is ranked second in importance.

14. Thirdly, problems and needs were studied in the context of three priority time frames:-

- (a) Immediate/Short term needs:- i.e. those critical requirements to be met between July and December 1979 that would restore operations in the different organisations to a minimum level of effectiveness. This category of need includes especially the following cases:-
 - where posts were vacated during or immediately after the liberation war by their incumbents who were invariably favourites of the military regime.
 - where holders of certain posts had to be replaced for one reason or another immediately after the change of government; and
 - where the posts had remained vacant during the time of the military regime due to the incumbents being forced to flee the country to ensure their personal safety.
- (b) Short/Medium term needs: i.e. those requirements that should be met as far as practicable between July 1979 and June 1980. These would include special short-term management courses and seminars for the retraining and preparation of several relatively less experienced officials who have been forced by the present circumstances to be appointed to positions of higher responsibilities, for which they need additional training to up-grade their skills.
- (c) Medium/Long term needs:- i.e. those requirements that need more time to plan and could be gradually fulfilled between July 1979 and December 1981, and possibly beyond that period. These would include long term training to acquire special academic or professional qualifications.

The Civil Service

15. According to the records of the Ministry of Public Service and Cabinet Affairs, the civil service, as of January 1979 was composed of some 24 ministries and special departments. Its total establishment was nearly 69,000 and consisted of about 38,300 approved posts and some 30,400 group employees.

16. In view of the large size of the civil service as well as its wide geographic dispersal, and given the time available to the team, only a limited study of the manpower needs of the service could be undertaken. Accordingly only a few departments, whose activities were considered to have an immediate impact in the context of the national reconstruction and rehabilitation programme, were studied in detail. The result of this study provides only a broad indication of the extent of the overall manpower needs of the service. The ministries and departments suggested by the Ministry of Public Service and Cabinet Affairs included:

- President's Office
- Ministry of Public Service and Cabinet Affairs
 - Public Service Commission
 - Institute of Public Administration
 - Printing Department

Ministry of Reconstruction and Rehabilitation -

- Reconstruction Department

Ministry of Education -

- Uganda College of Commerce
- Uganda Technical College

- National Teachers College
- Management Training and Advisory Centre

Ministry of Health

Ministry of Cooperatives and Marketing

Ministry of Natural Resources and Tourism:-

- Fisheries Department
- Geological Survey
- Water Development Resources

Ministry of Planning and Economic Development -

- Management Services Division, the Central agency responsible for job analysis, job evaluation, and position grading.
- Manpower Planning Division

Ministry of Agriculture

Ministry of Labour -

- Directorate of Industrial Training

Ministry of Regional Administration and Local Govt.

Problems and Constraints

17. One of the major problems found was the persistent acute shortage of professional and technical personnel. This is reflected by the steadily rising rate of vacancies shown in Annex 30.1. Although more time was needed to verify and justify the figures presented, records studied and interviews held all pointed to the existence of a real problem. The data in Table 30.2, collected rather hurriedly during the mission, is illustrative of the vacancy situation.

18. As a further illustration, Annex 30.2, extracted from the Ministry of Planning and Economic Development 1977 manpower survey, indicates that the vacancy rate in respect of professional and technical posts was more than 34%, with the greatest gaps being in the Ministries of Education (58%), and Works and Housing (50%). Annex 30.3, obtained from the same source as the previous Annex, reflects an over all vacancy rate of 28% for all ministries together, exceeded by the vacancy rates of 32 and 30% in the policy making and operational ministries respectively.

19. A further analysis in Annex 30.4, based on occupational groupings, reveals that by 1977, the highest vacancy rates were in such professional and technical occupations as architecture and town planning (46%), engineering (50%), engineering technician (46%); agriculture and related fields (51%); statistics (39%) and social work (3%).

20. According to the records of the Ministry of Public Service and Cabinet Affairs, the incidence of high vacancy rates has been compounded by over-establishment which in 1977 exceeded 18% of the approved posts. This illustrates some of the deficiencies and the break-down of the system of public personnel management and establishment control during the military regime. This, in the main, was due to executive impositions and abuse of authority which seriously undermined the effectiveness of the Public Service Commission, the Ministry of Public Service and Cabinet Affairs and Management Services Division.

Table 30.2

Ministry/ Department	Approved establish- ment	Status of Posts		Remarks
		Vacancies	Vacancy Ratio (%)	
President's Office	74	48	69	Most of the posts are in the cadre of Senior Administrators
Ministry of Recon. & Rehabilitation.	186	151	81	The Posts embrace mainly civil engineers and technicians & housing managers.
Ministry of Education	295	118	40	A number of the posts relate to education technicians.
Ministry of Agric.	215	95	44	The posts cover mainly agricultural engineers and scientists.
Ministry of Finance, Planning & Development	40	27	67	Most of the posts relate to statisticians and economists.
Ministry of Reg. Admin. & Local Govt.	61	51	84	The posts cover planning, accounts and inspector personnel.

21. Vacancies were not easy to fill from both internal and external sources partly because of the frightful atmosphere that had been created in the country by the military regime. A number of civil servants, in the interest of their personal security and safety, vacated their posts and fled the country. Similarly, Ugandans who had studied and qualified abroad chose to remain outside the country for the same reason. Also no non Ugandans were attracted into the country to seek employment, except a few international experts. At the time of liberation, there were only about 90 United Nations experts and four Commonwealth advisers in the country. In contrast there were at least 2,500 non-Ugandans in the public service in 1970.

22. It has been mentioned in several quarters that some, if not a substantial proportion, of the vacancies that exist could be filled by qualified Ugandans scattered over the globe. This hope can only be achieved if the following vital information can be made available: the number of Ugandans concerned; their respective qualifications and the relevance of those qualifications to the posts that are vacant; the current location of the Ugandans living abroad, and above all, their willingness to return home to contribute directly to the national reconstruction and rehabilitation effort. Currently, neither the Public Service Commission nor the Ministry of Public Service has sufficient documentation or any other form of up-to-date information on Ugandans abroad who could fill some of the numerous vacancies in the public services. It is understood that Makerere University has prepared a partial list.

23. It is estimated that the current total number of vacancies in the civil service is approximately 6,000 but the exact proportion of strategic posts is unknown, and will take some time to determine. In the meantime the more crucial requirements of which the Commonwealth Team became aware are summarised in Annex 30.5. There is the need for a comprehensive review of all civil service posts and staff complements in order to establish a sound basis for determining future manpower needs more realistically. The status of overall vacancies in the civil service as of June 1979 is shown in Annexure 30.6.

Table 30.3

Staffing Structures and Vacancies

Post	Min. of Public Service			Public Service Com.			Management Service Division		
	App'd estb.	Vacancies	Vacancy Ratio (%)	App'd estb.	Vacancies	Vacancy Ratio (%)	App'd estb.	Vacancies	Vacancy Ratio (%)
Permanent Secretary	1 ¹	1	100	-	-	-	-	-	-
Commissioner	2	2	100	1	-	-	1	-	-
Under Secretary	1 ¹	1	100	-	-	-	-	-	-
Principal Ast. Sec.	1	-	-	-	-	-	-	-	-
Chief Personnel Officer (PO)	3	3	100	1	1	100	-	-	-
Principal P.O./M.A/O&M officer	3	2	66.6	1	1	100	2	2	100
Senior P.O/ O&M officer	8	-	-	3	-	-	4	4	100
Personnel Officer/O&M officer	21	6	28.6	3	-	-	8 ²	-	-
TOTAL	40	15	37.5	9	2	22	15	6	40
Add	2 ¹	-	-	-	-	-	3 ²	-	-
Adjusted Total	42	15	35.7	9	2	22	18	6	33.3

Notes: (a) 1. The posts of Permanent Secretary and Under-Secretary are temporarily filled by acting appointments.

Source: (b) 2. The post of O & M Officer is over-established by 3. Information furnished by the Ministry of Public Service & Cabinet Affairs

24. The split in exercising central responsibility for civil service personnel management and control between the Ministry of Public Service and Cabinet Affairs and the Management Services Division of the Ministry of Finance has been one of the major factors obstructing the machinery for maintaining a realistic and up-to-date assessment of vacancies. Another major constraint has been the acute staff shortage and under-establishment of the principal central personnel agencies of the Government. Table 30.5 illustrates the staffing structure and the vacancy position in the Ministry of Public Service and Cabinet Affairs, the Public Service Commission and the Management Services Division.

25. Apart from the high incidence of vacancies which undermines the effectiveness of the three organisations, their combined approved strength of 69 posts is considered to be inadequate to cope efficiently with a civil service composed of about 38,300 established posts and some 30,400 group employees. This gives a ratio of one personnel officer to some 1,000 civil servants. A reasonable ratio would be about 1:800, implying that at least the minimum strength of the Central Personnel Agency should be about 90.

26. Another major manpower task to be tackled is retraining a substantial number of civil servants especially those who have been recently assigned to new and higher responsibilities in order to assist them to up-grade their skills. This requires a massive effort at strengthening the capacity of the existing training institutions and developing suitable training programmes to cater to different levels and cadres of posts. This is a task for which neither the Training Division of the Ministry of Public Service nor any of the existing departmental training institutions is sufficiently equipped, due to under-staffing and lack of suitable training materials and equipment.

27. Initially, this training requirement calls for a thorough review of the qualifications and experience of the staff concerned, especially those relatively new in their posts in order to properly assess their respective needs for training or retraining. Secondly, the training resources and facilities available should be assessed to ascertain the extent to which the new massive training needs could be effectively met. The capacity of the Training Division of the Ministry of Public Service and Cabinet Affairs to undertake this assignment is limited due to difficulties already explained.

28. While the problems of manpower were being studied the Team became aware that most of the personnel that were at post have been forced into frustrated idleness due to the effects of the liberation war. They lacked basic working tools and minimum operating facilities. Their offices had been looted and in some cases severely damaged. For example, there was hardly any public office in the Kampala and Entebbe areas which had not been thoroughly divested of its furniture, machinery, stationery and other office accessories. Doors and windows had been shattered creating considerable security problems. Agencies which are responsible for the central procurement and distribution of common supplies and equipment, such as the Printing Department responsible for the supply of stationery, and the Construction Department of the Ministry of National Reconstruction and Rehabilitation responsible for the supply of office furniture and maintenance of public buildings were the worst sufferers.

29. The damage to public buildings and the consequent disruption of work have been discussed in the paper on public sector administration.

The Teaching Service

30. The teaching service constitutes the second major employment sub-sector of the public sector. It comes under the jurisdiction of the Ministry of Education and is broadly concerned with the policy, general superintendence, budgetary control and staffing of all government sponsored primary and secondary schools, teachers' colleges and some technical, commercial and vocational training institutions, including the Uganda Technical College and the Uganda College of Commerce. In terms of established posts, that is excluding group employees, the total strength of the teaching service as of January 1979 was about 52,000 structured as follows:-

Table 30.4
Teaching Service Establishment

Level of Institution	Approved Establishment	Vacancies	Vacancy Ratio (%)
Primary Schools	47,420	7,495	16.2
Secondary Schools	3,691	969	26.2
Teachers Colleges	486	20	4.3
Technical Schools and Institutes	353	116	33.0
TOTAL	41,950	8,600	-

31. In this paper, attention is being focused mainly on the technical institutes and teachers' colleges since primary and secondary schools have been covered in a separate paper. In addition, training institutions under the jurisdiction of other ministries and departments are also discussed.

32. The institutions covered by this paper are listed in Annex 30.7 but those shown below deserve special mention. Their contribution to the reconstruction and rehabilitation programme is very crucial. They are the principal training institutions in Uganda to produce technicians and middle management personnel who are in extremely short supply as evidenced by the vacancy ratio of 33% shown in Table 30.4.

Name of Institution	Area of Specialisation	Parent Ministry
Uganda Technical Collge (UTC Kampala)	Focuses on higher technical education in the area of civil electrical and mechanical engineering	Ministry of Education
National Teachers College (NTC Kampala)	Focuses on training of secondary school teachers	Ministry of Education
Uganda College of Commerce (UCC Kampala)	Focuses on intermediate business education and secretarial studies	Ministry of Education
Management Training and Advisory Centre (MTAC, Kampala)	Focuses on middle management and supervisory courses for senior officials and management consultancy services.	Ministry of Industry and Power
Institute of Public Administration (IPA Kampala)	Focuses on courses on middle level administrative skills and Civil Service procedures	Ministry of Public Service and Cabinet Affairs
Industrial Training Centre (ITC, Kampala)	Focuses on vocational training in the different trades	Ministry of Labour
Law Development Centre (LDC, Kampala)	Focuses on Uganda Bar, para-legal courses, and law and order	Ministry of Justice

33. The short-fall in the supply of technicians and semi-professional personnel as illustrated in Annex 30.4 has been ranging between 16% in respect of Pharmaceutical Assistance and 46% in respect of Engineering Technicians. Some of the more relevant occupations in the context of the rehabilitation programme, for which skills are observed to be acutely short include Physical Science Technicians (31%); Medical Assistants (32%); Veterinary Assistants (38%); Statisticians (39%) and stenographic-typists (34%). A list of government departments indicating some of the professions in which staff shortages have been persistent and in respect of which training may be necessary, is shown in Annex 30.6.

34. The training institutions identified above as well as other departmental training programmes have existed for some time, a number of them for more than 10 years. Most of them have lacked the necessary basic resources to discharge their obligations effectively, due to continuing neglect during the military regime. Some of their needs in terms of manpower as well as physical facilities listed in Annex 30.7, are summarised in Table 30.5.

35. As can be seen from Table 30.5, the immediate needs of the training institutions include additional teaching staff as well as staff retraining. Library and text books, and means of transportation are also urgently needed. The Team was advised that the quality of teaching staff is in great need of strengthening and up-grading because during the military regime, staff development through sabbaticals, exchange programmes, seminars, workshops and special research activities was not encouraged nor supported.

36. Strengthening the capability and capacity of these technical and vocational training institutions, is extremely important. The rehabilitation programme has generated a massive need for staff training and retraining for which these institutions in their present condition do not seem adequately equipped. Almost every department and branch of Government is requesting the training and/or retraining of their personnel in different technical and managerial fields, most of which fall within the programmes of these institutions. For example from the data shown in Annex 30.9, it is estimated that parastatal organisations alone may require placements for about 3,300 of their staff during 1979/80 and 1980/81 as follows:-

2,400 in management field

850 in technical fields

Equally, placement for a large number of regular civil servants at different levels would also be needed in both managerial and technical fields during the same period.

Local Government Service

37. The third major employment sub-sector of the public sector is the local government service comprising district administrations and urban authorities administered by the Ministry of Regional Administration. The administrative structure of local government in Uganda was in the process of reorganisation during the mission of the Commonwealth Team. Since the change of Government after the liberation war, the size of regions and districts into which the country was administratively divided during the military regime has been reduced for the time being from 10 to 4 in respect of regions and from 40 to 23 in respect of districts. The change so far has not affected the sub-divisions within the districts which, as of the middle of June 1979, remained as follows:-

132 counties each headed administratively by a county chief;

624 sub-counties, each headed by a sub-county chief;

3,363 parishes, each headed by a parish chief;

6,578 sub-parishes, each headed by a sub-parish chief.

38. The reorganisation has also not affected the structure of the urban administration which for the time being has remained at 26 urban authorities consisting of a mixture of city, municipal and town councils.

Table 30.5

Needs of Training Institutions

	1979/80					1980/81						
	Staff Req'd.		Training		Equipment		Staff Req'd.		Training		Equipment	
	Ug.	N.Ug	D	No of Pers.	Kind	No. or Value	Ug.	N.Ug.	D	No. of Pers.	Kind	No. or Value
Uganda Coll. of Commerce	19	11	12	6	6	Lib.Bks Shs. 1.1m	-	-	-	9	24	Lib.Bks Shs 1.9m
Nat.Teachers' College	15	-	-	-	-	Text Bks Shs. .7m	-	-	-	-	-	TextBks Shs. .7m
Uganda Tech.College	-	30	12	13	6	Periodicals Shs. 1m	-	-	-	-	-	
Inst. of Pub.Admin	14	13	12	13	6	Buses/Vans Shs. 3m	-	-	-	-	-	
Mang.Trng. & Adv.Centre	12	4	12	11	6		-	7	24	-		
Directorate of Ind.Sch	-	-	-	-	-	Land rovers 5	-	7	24	30	6	
Agric. Colleges	-	-	-	-	-	cars 8	-	-	-	18	24	
Miscellaneous Deptl.Schs	21	23	12							16	18	

D = Duration in terms of number of months per person

N.Ug = Non-Ugandans

Ug = Ugandans

39. The total number of employees engaged by the district and urban authorities as of the middle of June 1979 was about 54,000 composed as in Table 30.6.

Table 30.6
Local Authority Employees

Class of Authority	Adminis- trative	Profess- ional	Supporting & Clerical staff	Local Police	Sub- Total	Group Employ- ees	Grand Total
					Eta. posts		
Urban Authorities	10,746	1859	5,080	5,000	22,685	15,800	38,485
District Authorities	Break down not obtained				3,624	11,926	15,550
					26,309	27,726	54,035

40. As a result of the reorganisation which has been in progress, it was not possible to obtain the necessary data to analyse and assess the real manpower needs in the local government administration. However, the Ministry of Regional Administration has requested as an immediate requirement the strengthening of staffing in a number of posts both at the Ministry level and at the local authorities level considered crucial in the rehabilitation programme. The request focuses on staff training as well as on the recruitment from external sources of specialists to fill certain key posts temporarily. The request covers:-

Posts to be filled:-

Department of Town and Regional Planning:-

Short-term

Long-term

Principal Planners - 1

Planners - 2

External Assistance
needed

External Assistance
needed

Kampala City Council

External assistance needed to fill the following posts:-

City Treasurer	- 1
Principal Accountant	- 2
Municipal Treasurers	- 2 (one for Gule and one for Fort Portal)
Chief City Planner	- 1
Principal Architects	- 2
Mechanical Engineers	- 2
Public Health Engineers	- 2
Civil Engineers	- 2

Training Requirements

Administrative Service

- Training - Local Government in selected African countries of 2-3 months duration each - 5 fellowships

Town and Regional Planning Department

- Short term mid-career courses - 3 fellowships

Urban Authorities

- Graduate courses in Landscaping of 2 years duration each - 2 fellowships
- Training in Structural engineering (Civil Engineers) - 2 fellowships
- Training for professional Accountancy Qualifications - 5 fellowships
- Training in Public Health Engineering (professional qualification) - 1 fellowship
- Training in Urban Administration - 4 fellowships

District Administration

- Training in Local Govt. Finance of about 3 months duration each - 2 fellowships
- Personnel Management)
- Transport Economics) details not specified
- Transport Management)

41. In addition the Ministry has submitted a long and detailed list of furniture, equipment, office supplies and technical requirements needed to restore operations following the disruptions of the liberation war, both at the Ministry headquarters and at the local authorities level. These physical needs are examined in the paper on public sector administration.

42. While accepting that there is a need for strengthening staff resources in the local government administration, the Commonwealth Team gained the impression that along with the reorganisation currently taking place, a thorough staff review should be undertaken as soon as practicable to enable the real manpower needs to be determined.

Parastatal Bodies

43. Unlike the three other employment sub-sectors of the public sector previously discussed, there is no Ministry or any other central government organisation responsible for overseeing and regulating the personnel and manpower administration in the numerous public enterprises and corporations that existed during the military regime. As a result, it has been difficult to trace and find out how many of these organisations continue to operate, how they are staffed and what may be their real manpower problems. As shown in Annex 30.8 there are supposed to be in existence some 126 enterprises categorised as follows:-

Financial Institutions	- 7
Commercial and Industrial Enterprises	- 10

Service Institutions	-	3
Marketing Boards	-	5
Semi Govt. Departments	-	5
Total		<u>126</u>
		=====

44. With the assistance of the sub-committee on Manpower and Public Service of the Interministerial Technical Liaison Committee, the Commonwealth Team was able to obtain some data on the manpower structure and training needs of about 43 different enterprises, which are analysed in Table 30.7 below:-

Table 30.7
Establishment Data for Selected Parastatals

Category of Occupation	STRUCTURE			TRAINING NEEDS		
	Auth. Est.	Vacancies	Vacancy Ratio (%)	Ext. Req.	Local Facilities	Total
Management/Adm. Posts	772	91	11.5	235	107	342
Professional Posts	503	160	31.8	157	49	206
Service Prof/Tech. Posts	1830	237	13.	179	569	748
Sub-Total	3105	488	14.4	571	725	1296
Others	30713	5990	-	35	5515	-
Grand Total	33,818	6,478	-	606	6240	

45. From the above analysis it is obvious that the parastatal bodies employ a substantial number of people. With only a third of the known organisations reporting, an approved establishment of nearly 40,000 posts is known to exist. On the basis of this information it can be assumed that the total establishment of all parastatal organisations in Uganda put together could absorb at least, 80,000 posts.

46. The information obtained also shows that the highest incidence of vacancies relates to the professional posts. Although this vacancy rate has also not been verified it is reasonable to believe that there is the need to strengthen professional capabilities in the parastatal organisations, especially during the period of reconstruction. The data collected reflects also a substantial need for staff training. According to the returns submitted, some 1300 employees in different strategic occupational categories are shown as requiring training of some sort. This is a further indication of the need to strengthen the capacity of the local training institutions.

47. In view of the insufficiency of data on the parastatal organisations a realistic assessment of their manpower needs cannot be achieved until it is known how many of these organisations will be retained as public institutions by the new Government. Parastatal organisations as a special subject has been treated in a separate paper.

Summary of Major Problems

48. Major manpower problems requiring urgent Government attention during the reconstruction and rehabilitation period may be summarised as follows:-

- (a) persisting shortage of professional and technical expertise in almost all branches of the public sector;
- (b) relative newness of several top administrators and policy advisers in their present jobs coupled with their temporary status in the posts they hold;
- (c) the paradox of over-establishment in the face of high vacancy rates, due to unauthorised personal appointments being made by the Head of State and his ministers during the military regime;
- (d) deficiencies in the existing administrative machinery and system for formulating manpower policies, personnel needs and developing human resources.

Policies and Actions To Be Taken

49. To alleviate some of the problems that have been identified, it is recommended that:-

- (a) a National Manpower and Training Council be established to advise the Government on over-all manpower, education, training, employment and incomes policies. This recommendation invokes a previous recommendation made in a Manpower Survey undertaken by the Ministry of Planning and Economic Development in 1967. Another major responsibility of the Council would be to undertake a continuing review of manpower and training needs and to provide guidelines meeting those needs. In particular, the Council should concern itself with the coordination in the use of training as well as with the development and maintenance of standards that would upgrade the level of professionalism in in-service training programmes.
- (b) As suggested in the 1967 Manpower Survey, the membership of the proposed Manpower and Training Council should be as broad-based as possible since the responsibility for many crucial aspects of manpower planning, staff development and human resources utilisation are shared widely by several interests both within the outside the Government. The principal institutions to be included in the membership are:-

the Central Government represented by the Ministries of Planning, Public Service and Cabinet Affairs, Education, Labour, Cooperatives and Marketing and Industry;

Parastatal Organisations represented by two or three large-scale public enterprises

Local Administration represented by a local authority from each of the four regions;

Educational and Training Institutions represented by a nominee each of Makerere University, Uganda Technical College, National Teachers' College, Uganda College of Commerce, Management Training and Advisory Centre, Directorate of Industrial Training, and the Agricultural Colleges.

Employers Association represented by two nominees.

The Trades Unions represented by two nominees.

- (c) The total membership may be left open in order that all interested parties with potential for contributing gainfully to the work of Council may be represented. The Council may meet about twice a year. In addition, the Council may appoint an executive technical panel or task force of up to about seven members which may meet as often as necessary in between Council meetings to undertake projects that may be assigned to it.
- (d) The Manpower Division of the Ministry of Planning should provide the Council with the necessary secretariat support. In addition the Ministry of Public Service and Cabinet Affairs should stand ready to provide any technical services that may be needed.
- (e) On a short term basis and to meet the urgent manpower needs of the nation during the period of rehabilitation, the existing Manpower and public Service Sub-committee of the Interministerial Technical Liaison Committee may be reconstituted into an interim National Manpower Council. The actions to be pursued by the reconstituted Manpower and Public Service Sub-committee in terms of the current national needs would include:-
- a search for and preparation of an inventory of Ugandans considered to be potentially qualified to fill some of the declared vacancies, especially those in the strategic posts. It is understood that an initiative in this direction has been taken already by Makerere University and the Public Service Commission. It is also understood that the UNDP office in Kampala has proposed a project to fund a number of short term missions to selected foreign countries by Ugandan officials to attract back home with job offerings, potential Ugandan specialists living abroad. According to partial data collected, it is estimated that strategic vacancies in the various occupations to be filled during the rehabilitation period exceed 1,500 as summarised below:-

Occupational Classification	1979/80	1980/81
Professional Personnel	180	130
Technical Personnel	550	370
Managerial/Admin. Pers.	150	200
TOTAL	880	700

- a detailed review and assessment of critical training and staff development needs in the strategic departments and organisations within the public sector - A partial estimate of training needs to be met between 1979/80 and 1981/81 is as follows:- Local training = 1,820 and external training = 1,160.
- the reviewing and endorsement of requests for training both locally and abroad, taking into consideration, limited institutional facilities and financial resources;
- reviewing and advising on requests for posts to be filled by non-Ugandan citizens, or in respect of which external technical assistance is to be sought. This is a device to ensure that a more realistic use is made of available external

specialists and resource personnel whose supply is limited.

50. Another major action needed to be taken by the Government is to protect the autonomy and operational independence of the Public Service Commission and the other Service Commissions and Committees in order to ensure their effectiveness. This is required to restore and preserve the merit system in appointments and promotions to public officers which was totally disregarded during the military regime.

51. The third major decision needed to be taken is to strengthen the central machinery in the Government on personnel policies and actions by transferring the responsibility for job evaluations and positions grading currently exercised independently by the Management Services Division of the Ministry of Finance to the Ministry of Public Service and Cabinet Affairs.

Resources Needed

52. Vast resources will be needed to accomplish the goals intended by the proposals that have been made. Substantial inputs in both human and material form deriving from both internal and external sources will be needed. The exact dimensions and cost of such inputs are difficult to assess realistically at present given the limited time available for this study. However as an interim measure the following proposals are made for consideration.

Internal Inputs

53. In order to provide adequate technical and executive support to the work of the Manpower and Public Service sub-committee which the Commonwealth Team proposes be reconstituted into an interim National Manpower and Training Council, vacancies in all the strategic posts in the Ministry of Public Service, the Management Services Division of the Ministry of Finance and in the Manpower Division of the Ministry of Planning should be suitably filled without further delay. At the time of the mission there were 23 vacancies out of an establishment of 64 approved strategic posts. In addition, special short-term crash in-service training programme should be launched at the Institute of Public Administration (IPA) to assist the staff in these agencies to up-grade their technical skills.

54. The second important internal input requirement is for all in-service training institutions including departmental training schools to be re-equipped with minimum delay to be able to mount crash training programmes to meet urgent staff retraining need as already discussed. The requirements for strengthening each of these institutions are summarised in Annex 30.7.

External Assistance

55. Since not all the crucial vacancies in the Ministry of Public Service and related agencies can be filled from local resources, some form of external assistance will be needed. There are three areas in which external assistance will be needed most:-

- organisation analysis to assist in structural studies and improvements;
- job analysis and evaluation to assist in grading and establishment matters; and
- staff development and conditions of service, to assist in staff training and career development matters.

56. One specialist in each of the three areas would be needed as soon as possible, preferably before the end of December 1979 for an initial minimum period of two years each. The United Nations has considerable experience in this field and may be approached for assistance.

57. The second area of need is the provision of fellowships for study abroad in different fields, for which many agencies have expressed need. There are several others which have requested certain critical vacancies be filled temporarily through external sources. A partial list of these requirements is shown in Annex 30.10. A more comprehensive list of these needs is being compiled by the manpower and public service sub-committee and is expected to be submitted as part of the sub-committee's report which is due for submission to the Government by the end of July 1979.

Summary of the Composition of Uganda Government
Public Service from October 1962 - July 1977

ANNEX 30.1

Citizenship	1962	1968	1970	1972	1974	1976	1977
	No.	No.	No.	No.	No.	No.	No.
	%	%	%	%	%	%	%
Ugandan	13,756	21,420	24,538	27,104	31,443	38,560	40,839
Non-Ugandan	3,140	2,569	2,528	1,884	401	303	225
Vacancies	848	4,802	8,213	10,938	14,458	13,717	16,678
Total	17,744	28,791	35,279	39,926	46,302	52,580	57,742

Source: Data made available by the Ministry of Public Service and
Cabinet Affairs, Entebbe, June 1979.

Staffing Structure By Occupational Classification
According To Ministries In The Ugandan Public Service - 1977

Ministry/Department/ Agency	Professional & Technical Personnel		Managerial & Administra- tive Personnel		Secretarial & Clerical		Service and Manual Workers	
Office of the President	4	7	331	111	149	35	151	66
National Assembly	2		3	0	28	6	8	3
Agriculture and Forestry	1,984	554	186	31	519	145	466	194
Audit	45	3	2	1	131	1	-	-
Commerce	1	0	86	0	211	0	6	0
Coop. & Comm.Dev.	9	3	25	3	1,979	197	1	0
Culture & Comm.Dev.	764	474	5	2	174	118	70	68
Education	165	232	220	171	270	183	6	5
Land & Water Res.	489	142	17	9	299	122	70	46
Planning & Econ.Dev.	48	22	13	8	60	30	-	-
Provincial Admin.	39	32	27	8	799	399	-	-
Public Service and Cabinet Affairs	27	6	39	8	115	85	4	3
Tourism, Game & Wildlife	2	1	6	3	45	8	11	13
Transport & Comms.	15	1	12	3	53	31	4	3
Works & Housing	280	279	17	6	457	135	205	56
Animal Resources	924	579	20	11	275	202	67	64
Finance	83	39	20	14	643	338	1	0
Foreign Affairs	11	0	211	0	191	0	0	0
Health	5,845	1,235	19	14	676	171	68	64
Industry & Power	4	3	15	2	45	9	0	0
Internal Affairs	57	29	14	7	114	49	24	10
Information & Broadcasting	231	112	30	2	172	80	144	65
Justice & Judiciary	317	100	5	3	880	137	0	0
Labour	35	26	13	7	420	187	2	2
TOTALS	11,382	3,878	1,306	424	17,795	2,668	1,308	712

Source: Ministry of Planning and Economic Development
Manpower Survey 1977

Staffing Position By Functional Groupings
Within The Ugandan Public Service, 1976/77

Ministry	Staffing Position		
	Requirements	Vacancies	Vacancy Ratio (%)
<u>Policy:</u>	2526	798	31.6
Office of the President	851	219	25.7
National Assembly	49	10	20.4
Planning & Economic Dev.	178	60	33.7
Public Service & Cabinet Affairs	299	106	35.5
Finance	1090	391	35.9
Industry & Power	59	12	20.3
<u>Regulatory:</u>	5634	1284	22.8
Audit	183	5	2.7
Provincial Administration	1238	440	35.5
Tourism, Game & Wildlife	86	25	29.1
Transport & Communication	130	48	36.9
Internal Affairs	291	99	34.0
Justice & Judiciary	1419	240	16.9
Labour	686	222	32.4
Commerce	304	-	-
Co-operative & Marketing	1297	205	15.8
<u>Operational:</u>	18063	5411	30.0
Agriculture & Forestry	3586	906	25.3
Culture & Comm. Development	1677	665	39.7
Education	1212	593	48.9
Land & Water Resources	1133	322	28.4
Works & Housing	1218	426	35.0
Animal Resources	1985	756	38.1
Foreign Affairs	413	-	-
Health	6013	1484	24.7
Information & Broadcasting	826	259	31.4
All Ministries	26223	7493	28.6

Source: Ministry of Finance, Planning & Economic Development,
Manpower Survey, 1977

Manpower Availability In Selected Occupations
Within The Public Service 1976/77

Occupational Group	Requirements	Vacancies	Vacancy Ratio (%)
Physical Science Technician	108	38	31
Architect & Town Planner	41	19	46
Engineer	217	110	51
Surveyor	190	51	27
Draughtsman	240	47	20
Engineering Technician	485	216	46
Biologist/Zoologist	83	31	37
Bacteriologist and Pharmacologist	44	15	34
Agronomist	125	33	26
Life Sciences Technician	2524	617	24
Medical Doctor ^a	511	205	40
Medical Assistant	514	166	32
Veterinarian	229	42	18
Veterinary Assistant	723	275	38
Pharmaceutical Assistant	93	15	16
Professional Nurse	2661	535	20
Statistician	31	12	39
Economist	146	39	27
Accountant	122	27	22
Jurist (Lawyer, Judge)	398	99	25
Teacher (Secondary & Higher)	349	160	46
Journalist	83	18	22
Social Worker	1053	321	31
Government Administrator	1707	424	28
Clerical Supervisor	1469	390	27
Government Executive Official	1422	447	31
Steno-typist	1392	479	34
Correspondence/Records Clerk	4672	992	21

^apresently one per 32,000 of population

Source: Ministry of Finance, Planning & Economic Development, Manpower Survey, 1977

Partial List Of Crucial Staffing Needs In The Civil Service

Ministry/Department	Administra- tive & Managerial Cadres	Executive Cadres	Engineers & Architects Surveyors	Economists & Statisticians	Agricultural & Veterinary Officers	Accountants & Auditors	Techni- cians	Scientist & Research Officers	Total
Animal Resources	41	5			95		115		256
Natural Resources & Tourism	25	17	50	2			554		646
Agriculture	38	13	11		20		19		101
Planning	6	1		11			4		22
Audit	6	2				18			26
Transport & Works	17	6	17				51		91
Culture & County Development	37	4					-		41
Information	28	5							33
Prisons	7	4	3						20
Housing	15	15	41	2	3	1	34		107
Public Service	10	13					51		74
President's Office	19	6					22		47
Reconstruction & Rehabilitation	10	-	32	3			70		115
	259	91	154	18	118	19	920		1579

Sources: Compiled from information made available from Ministries & Departments
during the Mission - June, 1979

Ugandan Public Service Establishment Status of Overall Vacancies - June 1979

Ministry/DEPT	Approved Established Posts	Posts Filled	Vacancies	Group Employees (Non Established Posts)
Office of the President	892	464	422	542
Judiciary	1106	910	196	412
National Assembly	53	33	22	122
Audit	270	171	99	32
Public Serv. & Cab.Af.	259	195	64	122
Foreign Affairs	420	267	153	47
Justice	337	217	120	44
Finance	1220	814	406	128
Commerce	302	341**	39	110
Agricult. & Forestry	3692	4281**	-	8380
Animal Resources	2152	1962	190	2518
Land & Water Resource	1398	1014	384	2967
Education	4025	791*	3234***	111
Health	6230	10273**	-	7393
Culture & Com.Dev.	1684	929	755	348
Housing & Publ.Bldgs	871	516	355	4194
Transport & Communication	735	491	244	6972
Information & Broadcast.	874	676	198	664
Industry & Power	62	51	11	25
Labour	440	343	97	143
Defence	479	190	289	2023
Internal Affairs	378	233	145	1080
Police Force	11235	747@	10488	773
Prisons Service	5070	514****	4556	663
Provincial Administration	1331	901	430	2016
Planning & Econ.Dev.	201	138	63	38
Co-oper. & Marketing	1321	1419**	98	539
Tourism & Wild Life	84	64	20	440
TOTAL	47121	28945&	23078+	42846

Explanatory Notes

- ** = Over-establishment
 * = Total does not include Unified Teaching Service Officers held against established posts.
 @ = Total does not include police officers on Scale 'UP'
 **** = Total does not include prison officers on Scale 'UP'
 *** = Total includes Unified Teaching Service Officers held against established posts.
 + = Figure includes police and prisons Officers on Scale 'UP'
 & = Figure will be raised by police and prisons Officers who are filling some posts on Scale 'UP'

Due to looting of records in the offices it has not been possible to give detailed composition of the Uganda Public Service which includes posts over-established in all Ministries. An exercise is being conducted on every Ministry/Department which completes its Staff List.

Source: Ministry of Public Service & Cabinet Affairs, Entebbe June 1979.

Educational and Departmental Training Institutions -
Detailed Analysis of Training and Experts Input Required

Institution	Special Area Where Manpower and Fellowships Inputs are Required	Additional Local Staff Required		Experts Input Required		Fellowships Required	
		1 Short Term	2 Long Term	1 Short Term	2 Long Term	1 Short Term	2 Long Term
Uganda College of Commerce	Accountancy	2		8			
	Banking	2					
	Insurance	7				6	9
	Marketing	3		3			
	Purchasing & Supplies Management	5					
	Transport Management	19		11		6	9
National Teachers' College	Business Education	3					
	Chemistry	1					
	Educational Psychology	1					
	Home Economics	2					
	Mathematics	2					
	Physical Education	1					
	Physics	3					
	Technical Subjects	2					
		15					
Uganda Technical College	Biological Sciences			2			
	Applied Mathematics			2			
	Water Engineering			3			
	Survey and Levelling			2			
	Structure (Civil)			3			
	Architecture			2			
	Production Engineering			2			
	Mechanical Engineering			2			
	Electronics			2			
	Electrical Engineering			2			
	Fluid Mechanics			1			
	Industrial Organisation & Orientation			2			
	Material Science (Physics)			1			
	Physics (Photography)			1			
	Glass Blowing and Related Technology			1			
	Electrical Installation			1			
	Electrical Design and Office Practice			1			
				30			
Agricultural Colleges :	Agronomy (Crop)					2 MSc for 2 yrs each	
	Animal Production					2 MSc for 2 yrs each	
	Pasture Agronomy					2 MSc for 2 yrs each	
	Horticulture					2 MSc for 2 yrs each	
	Agricultural Economics & Farm Management					2 MSc or MA for 2 yrs	
	Extension Education					2 MA for 2 yrs each	
	Soil Science					2 MSc for 2 yrs each	
	Biology (Botany & Zoology)					2 MSc for 2 yrs each	
	Agricultural Engineering					2 MSc for 2 yrs each	
						18 for 2 yrs each	

Institution	Special Area where Manpower and Fellowships Inputs are Required	Additional Local Staff Required		Experts Input Required		Fellowships Required	
		¹ Short Term	² Long Term	¹ Short Term	² Long Term	¹ Short Term	² Long Term
Institute of Public Administration	Public Administration	1		1			
	Office Management	2		2			
	English	1		-			
	Social Research	1		1			
	Accounting	3		3			
	Industrial Relations	1		1		13	
	Business Finance	1		1			
	Economics	1		1			
	Management Accounting	1		1			
	Project Management	1		1			
	Personnel Management	1		1			
		14		13		13	
Management Training & Advisory Centre	Supplies Management	1					2 Dip
	Marketing Management	1					2 MBA
	Management Services	1			1		2 MBA
	Management Accounting	2					7 MBA
	Production Management	1	1				2 MBA
	Construction Management	2					1 Dip
	Transport Management	1					2 Dip
	Industrial Management	1					2 Dip
	Research (Management)	1			1		2 Dip
	Documentation	1			1		
	General Management	1					
	Industrial Economics		1		1		1 Dip
	Corporate Planning				1		
	Cost Accounting				1		
	Supervisory Training						2 Dip
	Consulting Methodology					4(6 mths)	9 (6 mths)
	Teaching Methodology					5(6 mths)	8 (6 mths)
	Research Methodology					2(6 mths)	4 (6 mths)
	Personnel Management						2 MBA
	Project Appraisal Management						1 Dip
	Management Consultancy	12	4		1	11(6 mths)	11 Dip of 9 mths ea. 15 MBAs of 12 mths ea. 21 of 6 mths. ea.
³ Directorate of Industrial Training	Setting up of Refrigeration and Air conditioning workshop						12 of 6 mths.
	Establishment of Instructional Media Centre				1 for 2 yrs		
	Establishment of Technical Library				1 for 2 yrs		
	Establishment of Heat Treatment Workshop				1 for 2 yrs		
	Work Education (Trade Unions)				1 for 1 yr		
	Tool and Die Making				1 for 3 yrs		
	Actuarial Services to the Social Security Fund				1 for 2 yrs		
	Occupational Health and Hygiene						4 for 6 mths. ea. 8 for 6 mths. ea.

¹Short Term refers to a period of one year starting July 1979 to July 1980.

²Long Term refers to a period of longer than one year from July 1979.

³Here is requested for the Directorate and its centres.

INSTITUTION	SPECIAL AREA WHERE MANPOWER & FELLOWSHIP INPUTS ARE RE- QUIRED	ADDITIONAL LOCAL STAFF REQUIRED	EXPERTS INPUTS		FELLOWSHIPS REQUIRED	
			Short Term	Long Term	Short Term	Long Term
Nyabyeya Forestry College Veterinary Training Institute Entebbe	Just refresher courses other- wise self-sufficient					
	Agronomy	1				
	Economics	1				
	Physics	1				
	Chemistry	1				
	Mathematics	1				
	Dairy Technology	2				
Fisheries Training Institute	Milk Plant Engineering			1		
	Lecturer (Fish-culture)	1				
	Lecturer (Machine Engineering)		1			
	Lecturer (Fish Statistics of Economics)	1				
	Lecturer (Fish Tech)		1			
	Instructors (Boat Building)					
Survey Training School	Lecturer-Aquatic Biology	1				
	Surveying		1			1
	Physics	1				
	Mathematics	1				
	Cartography					2
	Air Survey		2			1
	Valuation		1			1
	Economics	1	1			1
	Building Construction Law	1				
	Lecturers - M.A. (SWSA)		4			4
Nsamizi Training Institute	Lecturers - B.A. (SWSA)	4				
	Professional Accountancy					
	Co-operative Philosophy		2			2
	Assistant Agricultural Officer	1	2			
	1 Legal Publications & Law Reporting	1	1			1
	2 Commercial and Land Transactions for Bar Course	1	1			1

Postgraduate
training for
existing staff

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EDUCATIONAL AND DEPARTMENT TRAINING INSTITUTIONS
Partial Training Materials and Physical Facilities Requirements

INSTITUTION ITEM	U.C.C.		N.T.C.		U.T.C.		M.T.A.C.		D.I.T.		I.P.A.	
	SHORT TERM	LONG TERM	SHORT TERM	LONG TERM	SHORT TERM	LONG TERM	SHORT TERM	LONG TERM	SHORT TERM	LONG TERM	SHORT TERM	LONG TERM
Typewriters	100	400			36		5		15		11	
Duplicating Machines					10		1		5		2	
Photocopying Machines			1		10		1		6		2	
Electric Calculators					5		6		7			
A: Desk					600		10					
B: Pocket												
Filing Cabinets			10		50		5		43		10	
Desks					50		3		17		10 ¹	
A: Office use					800				80			
B: Students use					50							
A: Office use							80		40		10	
B: Students use											342	
Chairs					128		280		238			
A: Office use					1,600							
B: Students use												
Stencil Paper			500		1,000		300		490		150	
(Reams)												
Typing Paper	240		100		10,000		100		110		115	
(Reams)												
File Covers			2,000		10,000		500		1,800		300	
(Packets)												
Carbon Paper			50		1,000		50		60		65	
(Reams)												
Ball Pens											60	
(Packets)												
Pencils	3,000											
Ruled Paper	180											
(Reams)												
Shorthand notebooks	3,000											
Maths Sets	200											
Drawing Paper					1,000		20					
(Reams)												
Tracing Paper					1,000							
(Reams)												
Graph Paper					1,000							
(Reams)												
Flip Charts												
Chalk												
Duplicating Ink							300				100	
(Bottles)												
Staplers	2,000								14			
Rulers	800								14			
Duplicating Paper												

1 For Typists
2 6 of which are Typists

ANNEX 30.7 (contd)
PART II: CIVIL SERVICE INSTITUTIONS

INSTITUTIONS	TEACHING MATERIALS		PHYSICAL FACILITIES	
	Immediate Needs	Long-term Needs	Immediate Needs	Long-term Needs
Bukalasa Agric. Coll.	16mm Sound Projector 22	Overhead Projectors 26		
Arapai Agric. Coll.	Slide Projector 29	Opaque Projectors 26		
Busitema Agric. Coll.	Cameras 26	Gestafe 4		
D.F.I. College	Megaphones 26	Combination Slide Projector 4		
	Sewing Machines 40	Cassette Tape Equipment 26		
	Complete Workshops 726	Video Tape Equipment 1		
	Tool Boxes 2	Portable Developing Kits 34		
	Mobile Workshops 50	Portable Projection Screens 26		
	Carpentry Kits 3	35mm Projectors 26		
	Books and Periodicals			
	Portable Public Loud Speakers			
Nyabyeya Forestry College	Haggar Alt. 50	Planimeters 10	Diesel Water Pumps Engines (25 Hp) 50	Landrovers 3
	Prism Compass 50	Plane Tables 50	3" Water pipes 1000 mtrs. 50	
	Relascipes 50	Pruning Saws 100	2" Water pipes 500 mtrs. 100	
	Survey Chains 50	Axes 100	1" Water pipes 500 mtrs. 100	
	Abney Levels 50	Hoes 100	1/2" Water pipes 1000 mtrs. 50	
	Measuring Tapes 50	Pruning Wires 50	1/4" Water pipes 500 mtrs. 2	
	Diameter Tapes 50	Botanical Presses 40	Landrovers 1	
	Power Saws 50	Engine Levels 100	Bus 1	
	Heavy Slashers 50	Matchets 100		
	Light Slashers 50			
Veterinary Training Institute, Entebbe	Laboratory Equipment 4		Overhaul of Milk Plant 1	
	Overhead Projector 1		Tractors 100	
	Slide Projector 2		Water pump 65	
	Film Projectors 1		Locks 65	
	Tape Recorder 1		Beds	
	Camera 1		Mattresses	

INSTITUTIONS	TEACHING MATERIALS		PHYSICAL FACILITIES	
	Immediate Needs	Long-term Needs	Immediate Needs	Long-term Needs
Fisheries Training Institute	Fish methods and Gear Technology equipment Aquatic - fisheries Biology lab. equip. Boat Building equipment - Timber - Fastenings - Paint (marine or oil) - Drawing equipment - Permanent Tools equipment - Student Tools issue Fish Technology equip.		Renovation of Class-room Renovation of offices of staff Staff Houses Renovation of Hostel block	Staff houses 4
Survey Training School	Books on: - Surveying up) to Dip.) Theory - Cartography) & to Dip.) Practice - Valuation) - Photogrammetry - Physics - (Light, heat, Elect.) Theodolites (various types) Steel Bands (Metric) Drawing Instruments (pieces) Set-squares (large size) Triangular scales (Metric) Light tables (portable) Drawing materials - Astrafoil sheets-rolls - Tracing paper	50 50 50 50 50 50 50 20 20 100 100 10 500 20 20	Survey Levels (various types) Levels staffs Plane Tables Prismatic compass Indian Clinometer Stereoscopic Alidades Tacheometers Substance Bars Telemeters Sextant Chaining Thermo-meters Roller grips Spring Ranging rods Linen tapes Heliographs Precise traversing equipment Computing machines	10 20 10 10 5 50 5 5 2 2 100 20 20 50 30 10 2 sets 20
				Lecture rooms Recreation hall Laboratories Library Darkroom Stores 5 1 2 1 1 2

INSTITUTIONS	TEACHING MATERIALS		PHYSICAL FACILITIES	
	Immediate Needs	Long-term Needs	Immediate Needs	Long-term Needs
Survey Training School (Contd.)	- Drafting film - pieces 50 - Bromide paper - rolls 20 - Cartridge paper - rolls 20 - Waterproof ink - dozens 10 - Plastic ink - dozens 10	- Binoculars 10 - Camping tents 10 - Camping equip 20 sets		
		<u>Cartography</u>		
		- Protractors 100 pieces - Graph pens 20 pieces - Leadweights 200 pieces - Scribing tools 20 - Guillotine 2 - Erasing slides 100 - Straight Edges 15		
Nsamizi Training Institute of Social Development	Books in various component subjects 2000 Audio Visual Aids Home Economics Equip.			
Law Development Centre	Legal text books and law books Film Projector	<u>Machinery - Printing</u> Linotype Machine 1 Original Heidelberg Printing Machine 100 1850 (letter press) Cutting Machine 1 Stitching Machine 1 Punching & Perfor- ming Machine 1 Bookbinding Machine (law reports) 1 Handproofing Machine - letter sets - trimming machines Raw materials and chemicals for printing	Plates 100 Tea Cups 100 Boiler 1 Motorised Lawnmower 2 Cookers (Electric) 10	

MANPOWERUNOFFICIAL- LIST OF PARASTATAL BODIES AND GOVERNMENT CONTROLLED COMPANIES IN UGANDA*A. FINANCIAL INSTITUTIONS

1. Bank of Uganda
2. Uganda Commercial Bank
3. Uganda Development Bank
4. National Insurance Corporation
5. Housing Finance Company of Uganda Ltd.
6. Development Finance Company of Uganda Ltd.
7. Ugadev Bank Limited.

B. COMMERCIAL ORGANISATIONS

8. Uganda Advisory Board of Trade
9. Agricultural Enterprises Limited
10. Uganda Airlines Corporation
11. Uganda Breweries Limited
12. Associated Match Company Limited
13. Uganda Cement Corporation
14. Uganda Chibuku Limited
15. Consolidated Printers
16. Uganda Development Corporation Ltd.
17. Dunlop East Africa Ltd.
18. East African Glass Works Ltd.
19. Uganda Fishnet Manufacturers Ltd.
20. International Television Sales Ltd.
21. Kakira Sugar Works Ltd.
22. Kampala International Hotel
23. Kilembe Mines Ltd.
24. National Sugar Works (Kinyala) Ltd.
25. Uganda Securiko Ltd.
26. National Sugar Factory (Lugazi) Ltd.
27. Lake Victoria Bottling Company Ltd.
28. Uganda Livestock Industries Ltd.
29. National Housing & Construction Corporation
30. The National Trust
31. Nile Breweries Ltd.
32. Uganda Paper Bag Manufactures (1973) Ltd.
33. Sango Bay Estates Ltd.
34. Uganda Steel Corporation
35. Uganda Tea Growers Corporation
36. Uganda Tourist Development Corporation
37. Uganda Toni Services Ltd.
38. National Textiles Board
39. Uganda Transport Company Ltd.
40. Peoples Transport Company Ltd.
41. Wood Industries Corporation
42. Uganda Pharmaceuticals Ltd.
43. Uganda Motors Ltd.
44. Ecta (Uganda) Limited
45. Gomba Motors Limited
46. Republic Motors Ltd.
47. Foods and Beverages Ltd.
48. Transocean Uganda Ltd.
49. Uganda Hardwares Ltd.
50. General Equipment (Uganda) Ltd.

*Source: Information obtained from Special Trading Committee Report 1976 & furnished by the Uganda Institute of Public Administration.

51. Uganda General Merchandise Ltd.
52. Fishnet Distributors (Uganda) Ltd.
53. R.O. Hamilton (Uganda) Ltd.
54. Intra-Africa Traders Ltd.
55. Uganda Industrial Machinery Ltd.
56. Uganda Duty Free Shop
57. Uganda Cement Industry (Tororo)
58. East African Distilleries Ltd.
59. Tororo Industrial Chemicals and Fertilisers Ltd.
60. Uganda Consolidated Properties Ltd.
61. Associated Paper Industries Ltd.
62. Uganda Grain Milling Company Ltd.
63. Uganda National Tobacco Corporation
64. Blenders Uganda Limited
65. Uganda Packaging Industries Ltd.
66. Printpak (Uganda) Limited.
67. Uganda Meat Packers Ltd.
68. Papco Industries Ltd.
69. Steel Corporation of E.A. Limited.
70. East Africa Steel Products Ltd.
71. Uganda Metal Industries Ltd.
72. African Ceramics Company Ltd.
73. Bjordal Mines Ltd.
74. Buildings Works and Painting Company Ltd.
75. Cable Corporation of Uganda Ltd.
76. Degra Engineering Company Uganda Ltd.
77. Jubilee Ice and Soda Works
78. Jute and Kenaf Project
79. Kalamu Limited.
80. Lake Katwe Salt Company Ltd.
81. Lango Development Company
82. Miltyres Limited
83. Mukisa Foods Limited
84. Ruwelux Uganda Limited
85. Spunpipe Construction Company Ltd.
86. Uganda Crano Industries Ltd.
87. Uganda Fabrics Limited.
88. Itama Mines
89. Kulubya Property Company Ltd.
90. Leather and Tanning Industries Uganda Ltd. (Jinja)
91. Universal Asbestos Manufacturing Company
92. Wheat and Barley Project.
93. Machinery Manufacturers Limited.
94. Lebel (East Africa) Ltd.
95. Wölfraam Investments Ltd.
96. Ugadev Holding Limited.
97. Uganda Leather and Tanning Industry Ltd. (Soroti)
98. Uganda Hoes Limited.
99. Uganda Beati Limited.
100. Uganda Metal Products and Enamelling Company Ltd.
101. Tororo Steel Works Ltd.
102. Uganda Wildlife Development Ltd.
103. Nyanza Textile Industries Ltd.
104. Pamba Textiles Ltd.
105. Uganda Rayon Textiles Manufacturers Ltd.
106. Uganda Garments (1973) Limited.
107. Uganda Bags and Hessian Mills Ltd.
108. African Textile Mill Ltd.
109. Uganda Spinning Mill Ltd.
110. African Furnishing House
111. Uganda Blanket Manufacturers (1973) Ltd.
112. United Garment Industries Ltd.
113. Uganda Hotels Ltd.

C. SERVICE INSTITUTIONS

- 114. Uganda Electricity Board
- 115. National Water and Sewerage Corporation
- 116. Departed Asians Property Custodian Board

D. MARKETING BOARDS

- 117. Coffee Marketing Board
- 118. Dairy Corporation
- 119. Lint Marketing Board
- 120. Produce Marketing Board
- 121. Uganda Tea Authority

E. SEMI-GOVERNMENT DEPARTMENTS

- 122. Uganda National Cultural Centre/National Theatre
- 123. Public Libraries Board
- 124. Uganda Museum and Antiquities
- 125. Uganda National Parks
- 126. National Council of Sports.

STATISTICS

Dudley Seers

Roots of Current Problems

All our work has been handicapped by the lack of usable statistics. The last comprehensive Statistical Abstract was published in 1977 in respect of 1974 (with a few tables only going up to 1972 or 1973), though some of the data can be brought up to date. Much of the data which do exist are unreliable.

2. The offices of the Department of Statistics were heavily looted. They lost desk calculators, typewriters, furniture and some records. All of their four cars were stolen, only the library was untouched. But the explanation of the statistical weaknesses lie much earlier, in the failure to build up the statistical staff and carry out basic surveys.

3. It is true that the number of statisticians with some professional qualification in post is about the same as it was in 1970, namely 18. However, as compared with their predecessors, the personnel are much less experienced and qualified. The posts of Chief Government Statistician and Deputy Chief Government Statistician are both vacant. Few of those in post have received post-graduate education in statistics - under the previous regime nobody was allowed to take up offers of places on courses in 'unfriendly' countries (e.g. the one year statistics course in Dar-es-Salaam), and programmes provided by 'friendly' countries were considered unsuitable.

4. Even if the staff was of the same quality as in 1970, it would face a bigger task now. Whereas some statistics, especially trade, were formerly compiled by the EAC Statistical Department, when this came to an end additional responsibilities fell on the national statistical departments, and Ugandan statisticians in the regional department obtained employment elsewhere.

5. The Department has also suffered very chronic foreign exchange shortages. It had continued after the break-up to get its trade statistics tabulated in Mombasa, but in 1977 it was refused foreign exchange for this. Recently the arrangement was resumed (and tables for 1977 and 1978 are due). Foreign exchange was not available either, for the purchase of books, periodicals, etc. and it was deemed imprudent even to accept them as gifts from 'unfriendly' countries.

6. It became difficult to obtain finance, staff, transport or authorisation for field surveys, and in fact the last comprehensive industrial survey was carried out in 1971, that of food consumption in rural areas in 1968, of agriculture in 1964/65, of household budgets in 1963/65, of distribution in 1966. The only survey of any size in recent years was a pilot population census in 1978.

7. There have been no innovations in the past few years; thus the general development of social indicators has passed Uganda by. It was considered imprudent to follow the example of other countries and carry out fertility surveys.

8. The quarterly employment and earnings surveys of the larger establishments have still continued. But these, like the crop surveys of the Ministry of Agriculture, are of incomplete coverage and variable quality. The latter, for example, are unlikely to have captured at all fully the food output now being grown by former cultivators of coffee and cotton.

9. The trade statistics are derived from invoices of imports cif Mombasa and exports fob the same port. These are adjusted by the same overall average percentage margin for freight across Kenya as in the 1960s. Data on export crops are taken from marketing boards and exclude smuggled output (very possibly more than one quarter of the coffee crop in recent years). For these two reasons, the trade returns are unreliable as a guide to actual values.

10. The monthly Kampala retail price indices (prepared separately for civil servants, artisans and unskilled workers) are weighted by the results of the 1963-65 household budget surveys. The prices used when goods are scarce in the shops are either those last recorded or those 'gazetted' (i.e. controlled). These indices have therefore been seriously understating, though to an unknown extent, the actual price inflation, at least since 1975 but especially in the six months up to last April. Conversely the indices will continue to rise in 1979 although the actual price trend should be downward. They are therefore highly misleading; since they are the only price indices available, there is in fact no way of knowing what is happening to prices in Uganda.

11. In 1970 it was possible to make moderately acceptable estimates for the national income, at least for monetary activities, using the surveys listed in paragraph 6. However, in subsequent years, due to the absence of fresh basic data, national income estimates have consisted essentially of those for the 1960s carried forward by the use of synthetic indicators based on hypotheses. Thus food output is estimated by assuming food consumption per capita has been unchanged since 1964-5. Similarly, the estimates for industrial output are based on the assumption that the structure of inputs has not changed since the 1965 industrial survey. For distribution, gross profit margins are assumed to have remained the same, each year up to the present, as they were in 1966; these are applied to the flows of merchandise (but only of those that are recorded). Agricultural prices are assumed to be those gazetted or paid in marketing (i.e. ignoring magendo). To say that these national income series depend so heavily on such assumptions as to be quite meaningless is no slight on the skills of the estimators; without comprehensive and regular basic data, anyone who wants such figures simply has to guess them in one way or another. One can, however, raise a question-mark about the wisdom not only of making the attempt but even more of publishing the results.

12. Essentially the published statistics assume that the structure of the economy is the same as in the 1960s. They ignore not merely all the myriad illegal transactions but also the considerable growth since then of the 'informal' sector, rural and urban.

13. There are also statistical units in the Ministry of Agriculture, the Ministry of Education, the Bank of Uganda and the Coffee Marketing Board, though not many of their personnel are professionally qualified. The Bank does, however, prepare useful financial statistics (which were partially suppressed under the military regime), and estimates the balances of payments.

The Task Ahead

14. Devising and monitoring policies of rehabilitation will be much harder than it need be because of the almost complete lack of usable statistics - e.g. on price movements. The coming job of constructing development strategies will be very difficult if information is not available on the output of the main sectors, on the composition and consumption of investment, on employment and unemployment, on trends in the population and on the distribution of the income both socially and geographically.

Policies and Resources Needed

15. The necessary programme falls into three stages. First, an immediate repair job is needed in the remainder of this year to make existing series as meaningful as possible. The Department plans to extend the indices to cover different groups, especially those in the rural areas. But the first task is to make the existing series usable. Even with such out of date weights, they would be of some value if actual prices were collected. Errors in weights of different items (i.e. differences between actual weights and a more up to date weighting pattern) only cause bias in an index to the extent that they are correlated with price movements. The existing series should be withdrawn for the period 1975 to the present, when many merely notional prices have been used. However, if proper current prices were used, rough month-to-month indices of price movements during the period of rehabilitation would be available. Moreover, the price level now could be compared with that of the early 1970s.

16. In addition, the establishment enquiries could easily be improved. A Cabinet directive would help get more prompt and proper returns - the great majority of establishments covered still lie in the public sector. Current margins for freight to and from Mombasa could be estimated for each commodity group and could be re-calculated. Proper statistics of exports, however, depend upon new price policies and reforms of the marketing boards which are necessary anyway (see the paper on agriculture).
17. The second stage, starting at the end of the year, would be a set of basic surveys similar to the group carried out in the 1960s. An agricultural census is needed not only to throw light on the changing pattern of land use and crop yields, but also to provide a frame for sample enquiries. One is being prepared by the Ministry for 1980, and FAO financial support is expected.¹
18. The Department plans socio-economic surveys, especially of the contribution of the non-monetary sector to GDP, rural construction and rural food balances. This is certainly along the right lines (though the point is what the non-monetary activities are, rather than their contribution to GDP). A population census is planned for December. This needs to be followed in 1980 by an industrial census and a household budget survey. Particular attention needs to be directed in all these surveys, as is planned for the socio-economic survey, to finding out about the new very large 'informal' sectors, which tend to be left out, especially in industrial enquiries.
19. Such a programme would make possible at least rudimentary development planning from 1981, especially if tabulation priorities were carefully defined. It would be useful also to develop social indicators, such as infant mortality, to enable social targets to be set, and to prepare more meaningful classifications of the accounts of government and parastatal bodies, including financial flows.
20. The third stage which could start in late 1981 would be the preparation of index numbers drawing on the basic surveys of the second stage. Further less essential basic surveys, e.g. of distribution, could also be carried out in the early 1980s.
21. Considerable strengthening of the statistical staff is needed for this big and technically demanding task. There are apparently eight professional vacancies and the Department has asked for an expansion of its professional establishment from 26 to 38.
22. The proposed staff would include a large national income section with eight professionals. This seems very dubious for the reasons outlined above. No meaningful national accounts data can be compiled after the execution and tabulation of basic surveys. In any case if they could be computed, they would be of little use for policy in the areas that lie ahead and might be positively misleading. What matters is not the rate of growth of the national income but its nature and composition (a growth rate of say 10% could well be highly damaging if it aggravated the imbalances and distortions in the economy). Thus both statistical development and economic policy needs, point to priority being given to the collection of basic data on output and prices in key sectors, not to compiling national income aggregates.

1 The survey would be instead of a Coffee Census (already approved). It would be an improvement on the one for 1964/65 if, inter alia, the geographical classifications were made appropriate. See Belshaw, D.G.R., 1975, Crop Production Data in Uganda: a Statistical Evaluation of International Agricultural Census Methodology, University of East Anglia, School of Development Studies, Discussion Paper No. 7, pp. 78.

23. In fact, surely the first step is to fill the post of Chief Government Statistician with a highly experienced expert capable of devising a statistical structure appropriate to Uganda's needs (not automatically applying standards and definitions developed elsewhere). This is indeed a challenging opportunity for the right person.

24. His (or her) programme of statistical development, which might of course be different from that outlined above, should be the basis of the staff expansion plan. In any case, there seems little point in expanding the establishment by 12 when eight posts are still unfilled. A step of this kind can easily lead to premature appointments of large numbers of people in senior posts on an acting basis, difficult to displace when candidates suitable for substantive appointment appear. The existing staff could handle the first stage of statistical reform, outlined in para 16, especially if attempts to construct national income estimates are abandoned. A reinforcement of perhaps six would however be needed in 1980, to carry out the second stage.

25. The Department is hoping to recruit Ugandans at present overseas and to take on recent graduates of Makerere for the more junior posts. However, the career it offers may not be sufficiently attractive for such a large expansion. (Apparently the majority of Makerere graduates with appropriate qualifications are more interested in careers in the Customs Department).

26. The new Ministry of Animal Resources also plans to create a statistical unit of its own. Since the supply of people with suitable qualifications willing to take up statistical careers is so small, this step seems unwise, especially at the present time, when the Statistics Department itself is expanding. It is in any case usually difficult to create small units with sufficient expertise to carry out a department's statistical requirements properly, let alone to play an adequate role in a national programme of statistical development. Surely the needs of this Ministry can better be met by the statistical unit of the Ministry of Agriculture, which would avoid duplication, e.g. of field staff.

27. The Department's proposals contain a suggestion for establishing an agro-economic survey unit, jointly with the Ministry of Agriculture, to carry out sample enquiries into farming systems and the structure of inputs, after the Census of Agriculture. Details on this are not available.

28. The Department badly needs replacement of its stolen vehicles, and indeed the programme outlined above would require a much larger fleet, especially for field surveys.

The External Contribution

29. It is not for me to say whether it is possible to find a Ugandan statistical expert capable of meeting the exacting requirements outlined above for the top post in the Department, and in addition - if one does exist - whether or on what terms he/she would take this post. The need is, however, urgent. Unless a good candidate is already in sight the post should be filled by someone on a technical assistance contract of two or (preferably) three years.

30. This is a key post now - how it is filled will affect the structure and quality of Uganda's statistics for decades. As for all such major appointments, it would be advisable to obtain an independent evaluation of any candidate offered by a technical assistance agency. The best possible Ugandan Deputy should be appointed with a view to his taking over after this period.

31. The Department feels the need for considerable technical assistance in statistics of trade, and in organising every aspect of the population census which is now very imminent.

32. The Department also rightly attaches importance to obtaining training for professional staff in these fields and others. The surveys proposed above (paragraph 17) would provide good practical training for junior staff under supervision but courses in other countries are also needed. Not the least advantage of this would be to acquaint

personnel with the practices in statistical offices abroad, from which they have been cut off in recent years.

33. It is doubtful however whether it will be necessary, as the Department plans, to give training priority over carrying out basic field surveys. That dilemma could be avoided if technical assistance is obtained for, say, four medium and senior level jobs too, to help develop routine statistical work; to assist with the big tasks of planning, executing, tabulating and analysing field surveys; and to release their counterparts for short-term overseas training. Additional short period reinforcement will in any case be needed during 1979 in the form of specialist help for the census, and in 1980 for the surveys prepared.

