SECTION II

Trends in the Expansion of Processing of Local Raw Materials in Developing Countries

Despite a certain 'restructuring of exports' from LDCs in favour of processed and resource-based manufactured products, and the increase in absolute terms of both the volume and value of their exports to DCs over the period 1966 to 1973, the relative share of developing countries in the world export markets nonetheless remains small and is actually declining for a number of processed raw materials. This is particularly the case for many processed foodstuffs, including beverages and tobacco.

As we saw in Section I, in 1974, for eleven major commodity groups, LDCs accounted for 61.2% of the raw material exports (in 1973 it was 62.5%) but only 20.8% of the processed products market. If we look at Table 1.5 and 1.6, the same regression, from raw to processed forms, is evident for all the product groups.

The developing countries are major producers and suppliers of many of the non-renewable natural resources; in 1975, as a group, they accounted for 52% of copper exports, 71% of bauxite exports, 84% of petroleum and approximately 40% of international trade in both nickel and iron ore exports. These five minerals alone accounted for more than 80% of the world value of mineral production.(1) Not only are LDCs important suppliers now in many natural resource groups but are likely to become increasingly more so, as supplies in DCs become depleted and new deposits continue to be discovered in developing countries. LDCs' importance in trade is further emphasised by the small proportion of their minerals production actually consumed domestically.

However, over the past two decades the proportion of all the minerals extracted in LDCs which are processed there, has remained fairly constant at only 30%.(2)

Trade in processed agricultural products accounts for approximately 20% of the value of world agricultural exports.(3) Although the developing countries' exports of agricultural raw materials in processed forms increased over the period 1960-69 by 60% - representing an annual growth rate of 5.4% - the exports of developed market economies rose by 75% (that is, 6.4% per annum) and those from the centrally planned economies by a rapid 155% (11% per annum). (4) Hence the relative share of LDCs in world export markets of processed agricultural products actually declined from about 20% in 1960 to 18.5% in 1970. This fall may be attributed mainly to the decline in vegetable oil exports from the Near East and Africa, the sharp fall in North African wine exports and slow increase in oilseed cakes and canned fish exports.

This shift in the balance of trade in processed commodities is also seen when we concentrate on trade only between LDCs and the OECD countries.(5) From 1966 to 1970 LDC exports of processed agricultural products increased by about 25%, whilst LDC imports, of the same product groups, from OECD rose by 60%. In the field of metals (ores, semi-processed and processed, combined) developing countries increased their exports to the OECD states by 32%, whilst over the same period (1966-1972) their imports of these products (see Table 2.5) rose by 80%. If we disaggregate the figures we can see that of the total OECD metal exports to LDCs, 82% were in semi-processed or processed forms, but only 7% of the LDC metal exports had undergone processing.

The share of developing countries in processed agricultural commodity exports remains small, despite the fact that world trade in processed foodstuffs is rapidly expanding. In an FAO study (6) of processed foods, over half the products had doubled their world export value during the First Development Decade; and these accounted for more than 40% total value of global processed food trade. Certainly the demand for processed agricultural products, particularly many foodstuffs, is more 'buoyant' than for the unprocessed forms. This can be explained by a number of factors: demand for processed foods is highly income elastic, so rising incomes and increased urbanisation have had significant effects. To the extent that the nutritional value of food is no longer of vital importance, especially in the DCs, the taste, presentation and various sophistications assume greater weight; exotic and dietetic foods, and soft drinks for example, are all increasingly in demand.

Convenience and 'time-saving' food preparations are becoming more and more attractive; also the growth in institutional eating places has raised the demand for processed catering products. Growing demand for animal proteins means an increasing need for animal feedstuffs, making the utilisation of various by-products a more viable and profitable proposition. All these are growth areas where LDCs have potential to enter the market on a competitive basis, and in Section IV, ways in which production might be stimulated will be suggested.

Nonetheless, despite the overall decline in the trade share of LDCs in processed agricultural commodities, there are a number of product groups where their market share has in fact increased. Indeed the developing countries have what may be defined as a 'strong trading position', that is to say they account for over 40% of world trade, in the meat and fish meal, coffee extracts, processed cocoa products (but not chocolate) and oilseed cakes and meal markets. In the latter group, however, the LDC market share declined during the sixties but their share of cocoa paste, powder and butter, soluble coffee and preserved vegetables trade has increased substantially. Other important processed food groups for LDCs, where they account for between 25-40% of world trade, are the cereal milling by-products, oils and fats, and preserved fruit. For the latter group the market share is increasing

A feature of global processed food trade is the importance of particular commodity groups: four processed product groups account for 60% of international trade in processed foodstuffs. The largest group are livestock products which, in 1970, had a market share of over 20%. The exports from

the developing countries are even more highly concentrated; the combined 'oilseeds, oils and fats' sector accounted for over 50% of the value of their exports. Conversely, the processed food trade of the OECD countries is in general well diversified, with no one product group accounting for more than 25% of their exports to LDCs.

It is also noteworthy, that nearly all the commodities entering the processed food trade, apart from some obvious exceptions like tropical foodstuffs, are produced in both developed and developing countries. Furthermore, for some of the fastest growing product groups (7) like confectionery, dairy products and convenience foods, which account for nearly 30% of the total processed food market, the developed market economies arguably hold "... inherent or traditional production advantages"; (8) indeed it is striking that LDCs account for less than 2% of international trade in these products.

The developed countries thus play a central role in processed foodstuffs and for a selected group of 'fast growing products' their trade over the 1960-69 period increased by over 70%. Furthermore, over 70% of total world trade in processed food is between the DCs while in contrast only about 10% of LDCs processed foodstuffs exports go to other developing countries; half of this is accounted for by Asia and a further 35% by Latin American countries.(9) As we suggest in Section IV, there is certainly considerable potential for developing such trade among developing countries by forming or strengthening regional trade groups. Aggregation, however, obscures important differences both between developing countries and between commodity groups.(10) The degree of specialisation varies from country to country, as does also the importance of particular food products in LDC export earnings.

The 'oils and fats' group (11) is the largest processed food sector in the exports of developing countries and (as already mentioned) accounted in 1970 for over 25% of the value of LDC exports to the OECD countries; but the rate of expansion in recent years has been only marginal (approximately 0.1% per annum) and the LDC share of exports to DCs fell from nearly 60% in 1965 to 53% in 1970. Over 85% of this commodity group is accounted for by vegetable oils. The major suppliers are Senegal and Nigeria and over two-thirds of vegetable oil exports are accounted for by five countries.

Another important related group are the 'oilseed cakes and meals'(12) but again the LDC market share, though substantial, is declining (e.g. from nearly half the market in 1965 to a 40% share in 1970). Latin American countries account for half these exports, with Argentina and Brazil as the two major suppliers.

A major product group are the processed fruits (13) where LDCs account for over 25% of OECD imports of this commodity; throughout the sixties OECD imports from LDCs grew at an annual rate of 8.5%, well above the average rate of 5.4% for all processed foodstuffs during that period. There are two main categories within this product group: dried fruit and secondly, preserved fruit and preparations, including canned fruit, jam and fruit juice. Although production and trade in canned fruit is dominated by the DCs, nonetheless the LDC share in world output increased from about 6% in 1960 to 10% in 1970, and exports increased over the period by 150%. A similar expansion is seen for fruit juices, where over the last decade both output and exports increased

substantially. Tropical fruit processing industries are currently at a very low level of development although certain unprocessed tropical fruit play a substantial role in international trade. The world import value of citrus fruit, as also that of bananas, is over US $1 billion. There is thus considerable potential for LDCs to develop the tropical fruit processing industries, as they often are the major - if not the sole - suppliers. A recent study (14) concludes that there are significant export possibilities for processed tropical fruits. An area of high potential, where trade at present is limited, is the 'exotic fruit' market, expecially in mangoes, guavas, papayas and passion fruit. A major processed tropical fruit are canned pineapples, where 75% of the total world production of 4.0 million tons are processed; they rank as high as the most popular canned deciduous fruits, e.g. pears, peaches, etc., where the DCs are the major suppliers.

If we now turn to the non-agricultural processing industries we find that despite efforts by developing countries to expand the degree of domestic processing, on average only 30% of the minerals extracted in LDCs do in fact get locally processed. Table 2.1 (15) illustrates the present situation. The typical pattern is one of LDCs exporting the majority of their minerals in unprocessed form while other regions, where often only a small amount of minerals is actually extracted, undertake the bulk of the processing. We see that the proportion of output processed locally in LDCs has remained almost stable, whereas in Western Europe it has increased fivefold.

However, there are considerable differences in the proportion of output that is domestically processed by LDCs for the various individual minerals, as the following table illustrates:

Minerals processed in LDCs
as a % of total minerals mined in LDCs

	1960	1970
Bauxite	3	10
Copper	75	78
Iron Ore	23	25
Lead	57	69
Tin	66	79
Zinc	29	42

Source: M. Radetzki, "Where should Developing Countries' minerals be processed?"

Copper is a particularly good illustrative example of the role which developing countries currently play in the processing of domestic raw materials. Even though the bulk of LDCs' copper production is processed domestically, at least to the metal ingot stage, we see that whilst LDCs and DCs accounted in 1975 for approximately the same share, 39%, of the world's copper production, the developed countries accounted for 47% of total world smelting capacity and LDCs only 31%; at the next processing stage of 'refining' DCs have a 55% share and LDCs 19.7%. Finally the developing countries consume only 6.3% of the world's copper, whilst the DCs consume 67.0%. (16) It is

also worth noting that while LDCs account for 39% of world copper output, they account for 52% of the raw copper market because a much smaller percentage is consumed domestically than in the DCs.

However, there are wide variations among the individual copper producing countries; the four biggest copper producers (Zambia, Zaire, Chile and Peru) smelted 92% of their copper ore, but while Zambia processed 94% of this to the next stage, Peru undertook further processing for only 20% of its smelted copper. (17)

The degree of processing of non-renewable resources that is undertaken locally in developing countries is partly determined by technological characteristics. Transport costs may be a major determining factor. The later stages of iron ore processing are very closely linked; consequently most processing industries are located in the developed countries, near the main markets.

However, the other essential, and sometimes all-important factor, is the role played by foreign investment. This, in fact, to a large extent determines the extent and trends in the amount of processing that is undertaken locally in LDCs. For example, over half the world's production of bauxite is owned and controlled by six transnational corporations. (18) They furthermore (in 1971) accounted for more than 75% of global aluminium production capacity and approximately 60% of primary aluminium production. These six transnational corporations get over half their supply of bauxite from developing countries but locate only some 30% of their alumina processing facilities there, and less than 10% of the bauxite produced in LDCs is actually processed to aluminium in LDCs by the transnational corporations.

Nickel is one of the minerals least processed in developing countries, even though the developing countries' capacity for smelting and refining nickel has been growing rapidly in recent years. (19)

In summary, we see that for a representative sample of processed foodstuffs and processed non-renewable natural resources, LDCs account on average for only 20% of international trade in these products despite the fact that as much as 60% of raw material exports originate from these countries.

The same pattern is repeated for trade in unprocessed and processed non-food agricultural products, like leather, pulp and paper, wood, jute, cotton and rubber industries. In all these commodities, LDCs account for less than one-third of international trade in a processed form. Jute is the only exception, where, in 1970, the LDCs had a 96% share in the world export market for raw jute, and accounted for 87% of the woven, jute fabrics exports. Nearly all these commodities face the additional problem of strong competition from the synthetics and "... an extra dimension is added to existing conflicts." (20) The added constraint this may place on LDCs domestically processing their raw materials, which must compete not only with natural forms processed in the DCs but also with a whole range of synthetic products, raises very important and interesting questions: but unfortunately it is not possible to consider them within the time constraint of this study. This certainly is an important area for further research. Thus throughout this

study it must be borne in mind that for a number of processed raw materials LDCs face constraints not only in the form of the obstacles presented by foreign investors, developed country trade policies, inadequate and fluctuating supplies, lack of credit and infrastructure facilities etc., but also competition from synthetic products.

We shall now turn, in Section III, to these constraints facing developing countries in their attempts to expand the degree of processing of their primary commodities, both for the domestic and world markets. As stated earlier, we are concentrating on the obstacles that relate specifically to processing industries, for to consider all the constraints on industrialisation per se is well beyond the scope of this survey.

TABLE 2.1 Minerals Processed as a Percentage of Total Minerals Mined Different Regions, 9 Major Minerals Combined, 1950, 1960 and 1970

Region	Percentage of mine production		
	1950	1960	1970
United States and Canada	146	179	179
Western Europe	250	381	1,046
Australia and South Africa	89	72	38
Developing market economies	30	28	29
Centrally planned economies	99	102	108
Total	100	100	100

1 Computed as the value produced by mining and processing operations as a percentage of total value produced, had all ore mined been processed to metal ingot stage, except for iron ore, manganese ore and phosphate rock for which pelletized or sinterized iron ore, ferromanganese, and superphosphate fertilizer were taken as representing the processed product.

SOURCE: UNCTC, Transnational Corporations and the Processing of Raw Materials, Feb. 1978.

TABLE 2.2a Participation of Developing Countries in Activities of Selected Mineral Industries

(Share of developing countries as percentage of total)

	Iron and Steel		Copper		Aluminium	
	Market Economies Only	World as a Whole	Market Economies Only	World as a Whole	Market Economies Only	World as a Whole
Reserves	41	23	60	53	-	62
Mining	34	30	46	37	59	52
Smelting	5	4	40	32	30[1]	27[1]
Refining	10	8	23	19	7	7
Markets	9	6	5	3	6	5

1 Alumina production.

SOURCE: As Table 2.1.

TABLE 2.2b Structure of the Iron and Steel Trade of Developing Countries by Processing Stage, 1973

($ million)

Exports by source and destination \ Stage of processing	Ore and concentrates	Semi-manufactures	Finished manufactures	Total
From developing to developed	719	529	175	1,423
From developing to developing	20	246	60	326
From developed to developing	4	5,274	735	6,013
Net developing country exports	715	-4,745	-560	-4,590

SOURCE: UNCTC, Transnational Corporations and the Processing of Raw Materials, Feb. 1978.

TABLE 2.3 World Production Trends in Selected Processed Foods, Feedstuffs and Beverages, 1960 and 1965 to 1969

ISIC Division	SITC Division	Description	1960	1965	1966	1967	1968	1969	Changes 1960 to 1969 (Percent)
					Thousand metric tons				
3111.06	012	Meat and edible offals cured salted or smoked	3,875	3,807	3,760	4,053	4,264	4,086	+ 5
3111.07	013.8	Meat, canned (excl. extracts and sausages)	1,089	1,315	1,269	1,359	1,390	1,296	+ 19
3112.01	022.1	Milk, condensed and evaporated	3,766	4,192	4,303	4,312	4,381	4,557	+ 21
3112.02	022.2	Milk, dried	2,090	3,142	3,306	3,798	4,134	4,169	+ 99
3112.03	023	Butter and ghee (product weight)	4,946	5,549	5,493	5,614	5,714	5,580	+ 13
3112.04	024	Cheese (excl. curd and processed cheese)	4,706	5,852	6,237	6,448	6,546	6,817	+ 45
3114.03	032.0(1)	Fish, canned	1,266	1,457	1,558	1,569	1,620	1,688	+ 33
3116.03	046.0(1)	Wheat flour	98,690	105,832	109,641	109,222	111,040	111,094	+ 13
3116.02	047.0(1)	Cereal flours, other than wheat	4,836	5,090	5,338	5,215	4,975	5,615	+ 16
3116.04	046.0(2) and 047.0(2)	Cereal meals and groats	6,319	7,383	7,981	8,559	8,742	8,901	+ 41
3117.03	048.3	Macaroni and noodle products, uncooked	4,398	4,879	4,851	5,030	4,535	4,904	+ 12
3117.91	048.4(2)	Biscuits	2,200	2,808	2,834	2,922	2,988	3,060	+ 39
3113.01	052	Fruit, dried	958	1,530	1,656	1,600	1,775	1,860	+ 94
3113.06	053.3	Fruit jams, marmalades and jellies	1,161	1,370	1,316	1,310	1,328	1,368	+ 18
3113.03	053.9	Fruit, canned or bottled	3,433	4,195	4,466	4,305	4,841	5,063	+ 47
3113.94	053.5	Fruit and vegetable juices	3,116	4,250	4,410	5,195	6,000	6,360	+104
3113.07	054.6(1)	Vegetables, frozen	1,059	1,675	1,961	2,120	2,270	2,447	+131
3113.08	055.5(2)	Vegetables, canned or bottled	6,784	8,537	9,321	10,527	10,793	10,318	+ 52
3119.93	062.0(1), 073 and 053.2	Sugar preparations and chocolate products	3,777	4,739	4,181	4,956	5,186	5,429	+ 44
3119.02	072.2	Cocoa powder, unsweetened	111	129	134	134	138	139	+ 25
3115....	081.3 and 081.4(2)	Oilseed cakes and fish meal	35,500	44,796	46,859	47,800	49,800	51,100	+ 44
3122.01	081.9(9)	Animal feedstuffs prepared	27,393	48,906	52,513	57,854	61,214	67,331	+146
3111.10	091.3	Lard	4,900	4,700	4,700	4,900	4,800	4,900	-
3115.13	091.4	Margarine and lard imitations	5,307	6,147	6,406	6,612	6,759	6,944	+ 31
3134.91	111.0(1) and (2)	Mineral waters and soft drinks (1,000 hectolitres)	133,156	184,715	209,487	224,581	240,065	259,454	+ 95
3132.02	112.1(2)	Wine excl. grape must (1,000 hectolitres)	24,347	28,855	27,291	28,519	28,321	27,712	+ 14
3133.01	112.3	Beer (1,000 hectolitres)	403,579	502,032	523,330	546,126	560,098	590,905	+ 46
3131.01	112.4	Distilled alcoholic beverages (1,000 hectolitres)	25,272	31,515	33,137	33,933	35,307	36,977	+ 46
...	4	Vegetable and animal fats and oils (excl. waxes)	27,210	27,220	28,001	35,110	36,359	36,740	+ 35

SOURCE: FAO, The Patterns and Trends of Trade in Processed Foods (ESCR:Misc.73/1)

TABLE 2.4 Sources of OECD Imports of Processed Food Groups by Economic Classes - 1969

'000 US Dollars

SITC	Product	World	from OECD	from centrally planned countries	from Australia, New Zealand, South Africa and Israel	from developing countries
012	Meat	352.5	305.3	42.2	1.3	3.7
013	Canned meat	684.8	406.7	91.6	13.4	173.1
022.1	Milk	56.6	...	...	...	...
022.2	Milk	223.5	...	...	...	...
023	Butter	427.2	237.6	10.8	175.8	3.0
024	Cheese and curd	571.5	501.4	3.9	62.0	4.2
032	Canned fish	425.6	328.3	25.8	12.6	58.9
046	Meal and flour of wheat	23.7	22.4	-	0.8	0.5
047	Meal and flour of other cereals	16.8	...	...	...	...
048	Cereals	294.0	274.2	10.9	5.9	3.0
052	Dried fruit	166.6	123.0	4.7	20.6	18.3
053	Preserved fruit	724.1	359.8	41.2	141.8	181.3
055	Preserved vegetables	491.6	334.2	35.7	4.3	117.4
061	Sugar preparations	58.1	...	...	...	...
062	Sugar confectionery	110.0	105.6	1.6	0.7	2.1
071.3	Coffee extracts	109.8	...	...	...	...
072.2	Cocoa powder	31.5	...	...	...	...
072.3	Cocoa powder	224.4	...	...	...	...
073	Chocolate	209.5	200.5	2.8	3.0	3.2
081.2	Cereal bran	113.4	...	...	...	...
081.3	Oilseed cakes and meals	760.9	422.3	20.1	11.0	307.5
081.4	Meat meal	401.3	120.1	2.7	53.3	225.2
091.4	Margarine	13.8	...	...	...	...
099	Food preparations	198.0	175.7	1.6	3.8	16.9
112.1	Wine and must	633.7	506.4	6.8	7.5	113.0
112.2	Beer and cider	7.6	...	...	...	...
112.3	Beer	120.7	116.8	2.2	0.2	1.5
112.4	Distilled alcoholic beverages	767.1	727.9	3.0	1.5	34.7
223.9	Oilseed flour	2.7	...	...	...	...
411.1	Oil of fish	93.0	55.2	6.2	9.3	22.3
411.3	Animal oils	159.5	124.3	2.1	19.1	14.0
421	Vegetable oils, soft	393.5	187.6	79.1	3.6	123.2
422	" " other	388.4	80.5	6.4	7.8	293.7
431	Animal and vegetable oils, processed	135.6	115.7	1.4	0.4	18.1
	TOTAL	9,391.0	6,689.7	402.8	559.7	1.738.8

SOURCE: FAO, The Patterns and Trends of Trade in Processed Foods (ESCR:Misc. 73/1)

TABLE 2.5 Trade in Metals Between OECD and Developing Countries 1966 and 1972

Metals [a]	1966	1972	1966	1972
1. Exports from OECD [b] to developing countries (f.o.b.)	($ million)		(Per cent)	
- Crude ores and concentrates	74	121	3	2
- Iron, steel and nonferrous metals (unwrought)	581	902	18	16
- Semi-processed metals	1,870	3,645	60	65
- Processed metals	599	962	19	17
Total	3,124	5,630	100	100
2. Imports by OECD [b] from developing countries (c.i.f.)				
- Crude ores and concentrates	2,249	2,910	48	47
- Iron, steel and nonferrous metals (unwrought)	2,359	2,885	50	46
- Semi-processed metals	41	242	1	4
- Processed metals	39	173	1	3
Total	4,688	6,210	100	100

a Crude ores and concentrates: SITC 28;
Iron, steel and nonferrous metals: SITC 671 + 672 + 68;
Semi-processed metals: SITC 67 - (671 + 672) + 691 + 692 + 693;
Processed metals: SITC 69 - (691 + 692 + 693).

b Excluding Turkey.

SOURCE: UNCTAD TD/B/C.1/197, p.5.

TABLE 2.6 Fast Growing Processed Foods and Their Annual Export Growth Rate by Value in Developed, Developing and Centrally Planned Countries 1960-1969 [1]

SITC Heading	Item	World Total	Developed Countries	Developing Countries	Centrally Planned Countries
		(Percent Change)			
024	Cheese and curd	7.6	7.3	- 0.4	28.0
048	Cereal preparations	10.5	10.5	0.4	12.3
053	Processed fruit	8.7	7.6	10.4	21.5
055	Processed vegetables	11.3	10.4	12.3	19.2
061.9	Sugar preparations	9.9	9.9	9.8	9.8
062	Sugar confectionery	8.6	8.4	30.0	13.0
071.3	Coffee extracts	13.7	10.1	24.5	...
072.2-3	Cocoa powder, butter and paste	11.3	9.5	13.8	...
073	Chocolate and cocoa preparations	13.0	12.7	...	28.5
081. 2	Cereal milling by-products	8.2	14.4	5.7	- 17.0
081.3	Oilseed cake and meals	9.5	15.0	6.5	- 3.7
081.4	Meat and fish meal	9.8	8.7	10.4	20.5
081.9	Pet foods and other prepared feedstuffs	14.3	14.3	14.3	14.3
099	Food preparations, n.e.s.	18.2	18.2	19.7	10.3
112.2-4	Beer and distilled alcoholic beverages	9.3	9.6	4.8	4.0

1 Current values calculated in U.S. dollars.

SOURCE: FAO, The Patterns and Trends of Trade in Processed Foods (ESCR: Misc.73/1).

TABLE 2.7 Exports of Fats and Oils (SITC 4), Preserved Vegetables (SITC 055), Preserved Fruits (SITC 053) and Canned Meat (SITC 013) from Developing Countries to Developing Country Markets, by Regions, 1964 and 1969

	Africa	Latin America	Near East	Asia	Others	Total D.C.'s
All developing countries						
Value of exports (million dollars)						
1964	23	29	3	50	1	106
1969	12	47	14	62	1	136
Annual growth rate 1964-69 (percent)	- 12.2	10.2	36.0	0.8	-	5.1
Africa						
Value of exports (million dollars)						
1964	10	-	5	7	1	23
1969	5	-	6	1	-	12
Annual growth rate 1964-69 (percent)	- 13.0	-	3.8	- 32.4	...	- 12.2
Latin America						
Value of exports (million dollars)						
1964	-	24	-	5	-	29
1969	2	38	1	4	2	47
Annual growth rate 1964-69 (percent)	...	9.6	...	- 4.4	...	10.2
Near East						
Value of exports (million dollars)						
1964	-	-	3	-	-	3
1969	1	-	13	-	-	14
Annual growth rate 1964-69 (percent)	...	...	34.0	-	-	36.0
Asia						
Value of exports (million dollars)						
1964	3	1	11	35	-	50
1969	3	-	8	49	2	62
Annual growth rate 1964-69 (percent)	-	...	- 6.2	7.0	...	4.4

SOURCE: FAO, The Patterns and Trends of Trade in Processed Foods (ESCR:Misc. 73/1).

TABLE 2.8 Leading Developing Country Exporters of Selected Processed Foods to the OECD Countries, 1969.
(Million Dollars)

	Total of 8 Product Groups	Canned Meat	Preserved fruit	Preserved vegetables	Cocoa butter paste & powder (1)	Oilseed cakes & meals	Fish & meat meal	Wine	Animal & veg. oils
Argentina	253.2	117.5	1.8	-	-	70.2	7.8	-	55.9
Peru	178.4	-	-	-	-	-	178.4	-	-
Brazil	157.4	22.1	12.4	2.0	25.9	48.4	-	-	46.6
Philippines	105.5	-	24.6	-	-	15.4	-	-	65.5
Taiwan	99.5	-	24.7	78.8	-	-	-	-	-
Algeria	98.7	-	-	3.4	-	2.2	-	91.4	1.7
Nigeria	90.4	-	-	-	24.1	23.2	-	-	43.1
Senegal	56.9	-	-	-	-	18.1	-	-	38.8
Morocco	50.4	-	11.5	9.9	-	1.2	3.3	8.6	15.9
Mexico	44.2	-	28.9	3.2	6.1	6.0	-	-	-
Malaysia	41.8	-	8.2	-	-	-	-	-	33.6
Indonesia	41.6	-	-	-	-	13.8	-	-	27.8
Ivory Coast	40.5	-	9.8	-	-	29.3	-	-	1.4
Zaire (Congo DR)	36.3	-	-	-	-	4.0	-	-	32.3
India	26.0	-	-	1.3	-	24.7	-	-	-
Chile	22.1	-	-	-	-	-	22.1	-	-
Tunisia	21.2	-	1.6	1.3	-	-	-	6.9	11.4
Ghana	21.1	-	-	-	21.1	-	-	-	-
Singapore	20.6	-	8.5	-	-	-	-	-	12.1
Paraguay	17.7	12.6	-	-	-	2.7	-	-	2.4
Cameroon	17.2	-	-	-	15.9	-	-	-	1.3
Sudan	16.4	-	-	-	-	16.4	-	-	-
Angola	13.0	-	-	-	-	-	10.7	-	2.3
Kenya	11.9	5.1	2.1	-	-	4.7	-	-	-
Tanzania	11.5	6.1	-	-	-	5.7	-	-	-
Thailand	9.4	-	2.0	6.2	-	1.2	-	-	-
Total of above	1,502.9	163.4	136.1	102.1	122.4	257.6	222.3	106.9	392.1
Others	190.5	9.7	45.2	15.3	4.6	49.9	2.9	6.1	56.8
All developing countries	1,693.4	173.1	181.3	117.4	127.0	307.5	225.2	113.0	448.9

SOURCE: FAO, The Patterns and Trends of Trade in Processed Foods (ESCR:Misc.73/1).

(1) FAO estimate.

TABLE 2.9 Pattern of Export Earnings from Oilseeds, Oils and Fats by Developed and Developing Countries in 1970

(US$ million)

Product	Oilseeds					Oils					Cakes				
	Total world exports	Total OECD exports	OECD exports as a % of total world exports	Total dev'g country exports	Dev'g country exports as a % of total world exports	Total world exports	Total OECD exports	OECD exports as a % of total world exports	Total dev'g country exports	Dev'g country exports as a % of total world exports	Total world exports	Total OECD exports	OECD exports as a % of total world exports	Total dev'g country exports	Dev'g country exports as a % of total world exports
Soyabean	1301	1221	94%	31	2%	311	302	97%	8	3%	504	460	91%	44	9%
Cottonseed	32	3	9%	29	91%	65	46	71%	17	26%	77	2	3%	75	97%
Groundnut	322	47	15%	269	84%	146	19	13%	124	85%	126	5	4%	121	96%
Sunflower seed	70	20	29%	3	4%	195	30	15%	21	11%	35	10	29%	25	71%
Rapeseed	145	134	92%	3	2%	51	33	65%	1	2%	15	13	87%	2	13%
Linseed	71	68	96%	3	4%	57	20	35%	38	67%	49	10	20%	39	80%
Copra	203	0.1	0.05%	203	100%	234	20	9%	214	91%	30	3	10%	27	90%
Castor oil	14			10	71%	50	3	6%	45	90%					
Olive oil						184	145	79%	39	21%					
Palm-Palm kernel	80	0.1	0.13%	80	100%	244	23	9%	221	91%	19	7	37%	12	63%
Tung oil						16	1	6%	12	75%					
Sesame seed	46	0.2	0.43%	46	100%										
Oilseed, cake and meal (nes)											40	13	33%	27	68%
Meat meal and fish meal											531	167	31%	361	68%
Oils of fish and marine animals						130	70	54%	51	39%					
Animal oils, fats and greases except lard						324	297	92%	24	7%					
Total	2284	1493	65%	677	30%	2007	1009	50%	815	41%	1426	690	48%	733	51%

SOURCE: OECD, "Processed Agricultural Products and Agricultural Adjustment", July 1973.

TABLE 2.10 Production and Exports of Processed Fruit Products by Selected Developed and Developing Countries in 1970

	Dried Fruit	Canned Fruit	Fruit Juice	Frozen Fruit
	('000 m.t.)		(million hl)	('000 m.t.)
Production:				
Total world production	2,961.5	4,410.5	35.4	388.4
Total OECD production	984.9	3,403.6	31.6	332.4
Total OECD production as a % of total world production	33%	77%	89%	86%
Total developing country production	1,954.4	478.5	3.2	56.0
Total developing country production as a % of total world production	66%	11%	9%	14%
Exports:				
Total world exports	980.4	1,456.0	7.7	132.3
Total OECD exports	469.3	620.4	4.5	43.0
Total OECD exports as a % of total world exports	48%	43%	58%	32%
Total developing country exports	487.2	395.5	2.6	56.0
Total developing country exports as a % of total world exports	50%	27%	34%	42%

Note: The country coverage is not complete, but it is believed to be representative.

SOURCE: OECD, "Processed Agricultural Products and Agricultural Adjustment", July 1973.

TABLE 2.11 Distribution of Copper Extraction and Processing Capacity among Developed and Developing Market Economies and Centrally Planned Economies, 1975

	Developed market economies	Developing market economies	Centrally planned economies	World
EXTRACTING				
Thousands of metric tons	2817.0	2858.0	1622.0	7297.0
Percentage of total	38.6	39.2	22.2	100.0
SMELTING				
Thousands of metric tons	3421.0	2224.0	1630.0	7275.0
Percentage of total	47.0	30.6	22.4	100.0
REFINING				
Thousands of metric tons	4619.0	1646.0	2102.0	8367.0
Percentage of total	55.2	19.7	25.1	100.0
CONSUMPTION				
Thousands of metric tons	5020.0	471.0	2005.0	7494.0
Percentage of total	67.0	6.3	26.7	100.0

SOURCE: UNCTC, "Transnational Corporations and the Processing of Raw Materials", February 1978.

TABLE 2.12 Percentage Distribution of Company-owned Capacities in Six Major Bauxite-aluminium Corporations in 1975[1]

	Bauxite		Alumina		Primary Aluminium	
	DMEs[2]	LDCs[3]	DMEs	LDCs	DMEs	LDCs
Alcan	9	91	55	45	93	7
Alcoa	31	69	72	28	94	6
Alusuisse	73	37	85	15	100	0
Kaiser	40	60	89	11	83	17
Pechiney Ugine Kuhlmann	84	16	91	9	95	5
Reynolds	16	84	86	14	97	3

[1] Capacity refers to volume of production in plants owned by various companies.

[2] DME = Developed Market Economies.

[3] LDC = Developing countries.

SOURCE: as Table 2.13.

TABLE 2.13 Smelter and Refinery Production of Nickel, in 1000 Tons, Metal Content 1955-75, in Developed and Developing Market and Centrally Planned Economies

	1955		1975[1]	
	tonnage	share (%)	tonnage	share (%)
Developing countries	3.7	1.5	99.3	14.2
Developed market economy countries	190.8	79.6	428.0	61.2
Centrally planned economy countries[2]	45.1	18.8	172.6	24.7
World	239.6	100.0	699.9	100.0

[1] 1975 is not fully representative for the long-term trend as production fell in most developed market economies resulting in an unusually low share for these countries.

[2] Excluding Cuba.

SOURCE: UNCTC, "Transnational Corporations and the Processing of Raw Materials", February 1978.

Footnotes

1. UNCTC, Transnational Corporations and the Processing of Raw Materials, p.4.

2. See Table 2.1.

3. See Table 2.3 for global production trends in selected foodstuffs over the '60's.

4. FAO, The Patterns and Trends of Trade in Processed Foods, Feedstuffs and Beverages during the 1960's, p.18.

5. See Table 2.4 for OECD imports of processed foodstuffs and Table 2.5 for trade between OECD and LDCs in metals.

6. FAO, The Patterns and Trends of Trade in Processed Foods, Feedstuffs and Beverages during the 1960's, especially p.7.

7. See Table 2.6.

8. FAO, The Patterns and Trends of Trade in Processed Foods, Feedstuffs and Beverages during the 1960's, p.7.

9. See Table 2.7.

10. See Table 2.8.

11. See Table 2.9.

12. and again Table 2.9.

13. See Table 2.10.

14. OECD, Tropical Fruit Processing Industry, 1976.

15. See also Tables 2.2a and 2.2b

16. See Table 2.11.

17. Source: UNCTC, Transnational Corporations and the Processing of Raw Materials, especially p.9.

18. See Table 2.12.

19. See Table 2.13.

20. L.N. Rangarajan, Commodity Conflicts, p.182; and also pp. 180-89, where the following articles are referred to : Journal of World Trade Law Nos. 5, 6 and 7 for series of studies on the 'Challenge of synthetics' particularly to textiles, hides and skins, rubber, hard fibres (sisal, abaca etc.) and jute. And also E.R. Grilli, "The Future of Hard Fibres and Competition from Synthetics", IBRD Staff Occasional Papers No.19, 1975.