

CHAPTER 1

Education in Rural Areas: An Overview

INTRODUCTION

1. It is now recognised that comprehensive policies and programmes are necessary to raise the level of skills of rural communities and to develop attitudes of sympathetic understanding towards the complex social and economic changes which make up the development process. The selection of rural communities for special attention at the end of the first United Nations development decade reflects the disappointment with the results of concentration on modern industrial production, large-scale mechanised agriculture and the education and training of high-level manpower. Experience has revealed unforeseen difficulties and the high cost of creating job opportunities in the modernised sectors of the economies of low-income countries. Experience has also revealed the failure of such investment to provide sufficient openings for the increasing numbers of young people at all levels whose aspirations are directed to employment in the modern sector.

2. A further stimulus to the formulation of an alternative strategy is the realisation that many of the sharpest social problems which affect the less affluent countries of the world at present are felt most acutely in the rural areas of these countries. Improved living conditions, and particularly amenities such as electric light, piped water and modern sanitation, are much more prevalent in urban than in rural areas. Opportunities for cash-earning employment also are predominantly to be found in the urban areas. The seats of government and administration are to be found in urban communities and decision-making is influenced by that fact. The cities have a particular appeal for young people because of the facilities and amenities to be found in them and not in the rural areas. In economic terms, it is the farming community which suffers

most from fluctuations in world commodity prices, whose children find it most difficult to find places in schools and drop out earliest, and who benefit least from social welfare programmes. Yet rural people are still the overwhelming majority of the population in most developing countries and constitute the mass of the nations' tax-payers and the politicians' constituents. Many young people reared in a rural environment see no prospect, if they remain in the rural areas, of escape from a life that is arduous and brings little material reward. They emigrate to the cities, thereby adding to an already depressed employment market and increasing the strain on over-stretched social services.

3. Rural dwellers represent a major political force which must be taken into account. They can and do express their dissatisfaction with an established order which does not appear to cater for their needs. Development programmes prepared without the active participation of the established rural population have a very high failure rate. The rural population can, through non-co-operation, very effectively impede any development strategy. On the other hand rural people, given the skills, motivation and leadership, can participate constructively in development activity. They may indeed achieve economic gains of a permanent and widespread nature upon which development can continue through the gradual increase in agricultural surpluses and the progressive diversification of the rural economy. Above all, it has been increasingly recognised that social and economic development are interdependent. The need now is for comprehensive programmes which seek to raise the overall level of rural living, the technical skills, the education and social welfare and the purchasing power of whole communities, and so motivate them that they will improve their economic status with the minimum of social disruption.

4. There must always be a place in development planning for specific activities of high capital intensity and for skills of the highest professional standard, but in many situations these must be complemented by programmes designed to produce the necessary level of appropriate skills carefully related to real needs at local level. The way is thus cleared for broad planning in education and rural development for the benefit of the majority of the community, the rural masses.

5. The Commonwealth Conference on Education in Rural Areas accepted that the range of educational activities in rural areas should normally be designed to meet the needs of four

major groupings, membership of which overlaps. The need for a comprehensive rural development strategy requires that any plan for education and training in rural areas should be as well integrated as possible, with the maximum of operational co-ordination among the various agencies involved. One of the weaknesses in the way in which educational influences have been brought to bear upon rural communities is the tendency towards compartmentalisation separating the schoolmaster, the social welfare and community development worker, the instructor in technical skills, and the agricultural extension agent, all of whom are engaged in the education and training of rural people. The need is for a common appreciation of the task which they all share and for each kind of educator to contribute what he can towards the work of the others.

6. The conference sought points of contact between four kinds of educators working among rural people - those working in the formal school, those engaged in all levels of adult education and community development, those concerned particularly with the education and training of out-of-school youth and those involved in the various forms of agricultural education and training. The broad aim of the conference was to enable such educators to pool their thinking with fellow specialists from other Commonwealth countries, and to bring together the various sets of interests so that shared objectives could be clearly understood and areas for co-operation discerned. The attainment of this objective was facilitated by a tendency during discussion to range from topics which were the exclusive concern of the particular group, for example the role of the inspector of schools in rural areas, to topics which were of interest to all groups, for example the preparation and production of educational media. This review of the collective thinking of the conference therefore seeks to examine, for each of the four main conference themes, first, those elements of special concern, and, secondly, those elements where a co-ordinated approach may be devised.

THE FORMAL SCHOOL

7. The conference reviewed the responsibilities of the formal school in rural areas towards the community as a whole and rural development generally. A matter of major interest in the discussion was the tendency of the school to be treated as a self-contained institution. This interest was expressed positively by emphasising the fundamental need for school and community to work together to the maximum mutual benefit. It was recognised that there are limitations to what the typical

rural primary school can achieve in practice. It was considered, nevertheless, that the rural school can usefully contribute towards the mobilisation of the rural community through the formation of attitudes sympathetic to development among young people. It was also seen as one of the sources of leadership in the rural areas and a resource in terms of physical plant and equipment by which some of the broader social and educational needs of rural societies might be satisfied.

8. The first responsibility of the school is to provide for the children a satisfactory education in the rural context. There are several factors which militate against this. Among them are the isolation of the rural schoolmaster from his fellow teachers and from new ideas and techniques, deficiencies in standards of building and elementary equipment, the inadequacies of much teacher training, excessively overcrowded classrooms, the low morale of the teaching profession in the face of low salaries and the presence of other government personnel who have moved into the rural area and assumed some of the teacher's role as adviser and mentor to the rural community, thus reducing his prestige.

9. Before new responsibilities can be laid on rural teachers, programmes must be developed which will better enable them to carry out their primary responsibility. These will mean new approaches to the pre-service and in-service training of teachers in order to raise the professional quality of the staff involved in rural schools, a broadened role for the schools inspector in the rural areas, emphasising his function as adviser rather than "inspector" (with its intimidatory overtones). They will also mean systematic attempts to develop the physical and material resources of the schools by such means as expanded school building programmes using low-cost methods of construction, and the promotion of local production of simple learning and teaching materials.

10. Once this foundation is provided, there are a number of possibilities of the deployment of the resources of the rural school so that it may have a beneficial influence on the rural community and stimulate development activity.

11. The main area where the school can have such an influence is in the formation in rural children of attitudes sympathetic to life in the rural areas. Such attitudes can best be promoted through the development of integrated curricula which will build upon a foundation of basic skills by developing con-

fidence, curiosity, self-reliance and the ability to communicate. Such curricula would clearly place a greater emphasis than has often been the case upon independent study and enquiry by the child himself, designed to bring him into direct contact with his local environment, using this to the maximum in developing basic skills, promoting a familiarity with the processes of nature and contributing to an understanding of the potentialities of rural living. Such an approach would not mean that rural primary schools would teach technical skills whether in agriculture or in other craft activities. These schools would seek to establish the foundation of basic skills and attitudes upon which specific vocational training outside the school system might subsequently build.

12. To bring about these changes the teacher will need to be retrained in new techniques which differ radically from traditional methods and may not be welcomed by many teachers whose practices are set hard. Teachers must also be involved in developing new curricula, because the need to relate curricula to the immediate situation means that much of the development work must take place at local level. A special place was seen therefore for local teachers' centres which might serve this purpose as well as assisting in breaking down the isolation of teachers in rural schools.

13. The initial training of teachers also merits attention. Many training colleges tend to train for an essentially static teaching situation and consequently produce teachers who are unlikely to stimulate attitudes in their pupils which enable them to further and profit from the cumulative process of social change in the rural areas. Teacher education and training is a shared responsibility involving Ministries, inspectorates, professional associations, headmasters, senior teachers, teacher training colleges and Institutes and Schools of Education. These last should have an operational as well as a research function and be especially concerned to ensure that the activities of the teachers' colleges are as appropriate as possible to the educational, social and economic realities of the communities in which the teachers serve.

Evaluation

14. Current practices in examinations and testing of pupils should also be re-examined as to their relevance in relation to the need for the schools to contribute towards the development of rural society. Accepting the need to promote specific

basic skills and attitudes in individual pupils for whom in the majority of cases there can be nothing more than primary education, the trend away from terminal testing should be encouraged. The practice of continuous assessment should be developed so that the individual needs and aptitudes of each pupil become clear to the teacher, when appropriate steps can be taken to develop them.

15. Nevertheless, valid assessment of pupils at the end of the primary school course is necessary so that the most suitable students can be selected for the comparatively few secondary schools that are available in many predominantly rural countries. In particular, means should be devised to compensate for the difference in levels of attainment between pupils of urban and rural origin in secondary entrance examinations. Selection procedures valid for all pupils at this stage should be devised in preference to the application of some form of weighting to examinations which would favour pupils from rural areas.

Educational media in the school

16. Emphasis on the individual approach to learning requires a greater range of learning and teaching materials, including reading material, than the typical rural school can normally offer. Books are probably the most crucial of materials and their supply presents specially difficult problems which can only be solved at the national level through the development of training and production facilities, possibly with international assistance. Some other media offer the prospect of local self help. Schools could act as community resource centres for the production of simple educational materials, for example village newspapers, and serve some of the needs of both the schools and various workers in adult education, community development and extension work. The more complicated aids to learning, requiring expert technical and professional staff to produce test, operate and service them, can in certain contexts be valuable. There is however, a possible danger that administrators may put too much faith in what can be achieved through expensive ventures in the mass media. It is important to maintain a sense of priorities and to take into account the costs and benefits of such activities as compared with less spectacular work with lower cost media.

The school and the community

17. The relationship between the school and community

must be reinforced and extended if the school pupil is to profit to the maximum from the physical and human environment in which he lives. The school community should play a continuing part in the educational life of the school. In addition, the school should become a focal point for all educational activities in a particular rural area, providing a direct educational service to children and also supporting services to other educational workers. At the same time the rural teacher must be prepared to serve as a leader and to stimulate development generally by sharing with the community what he has to contribute.

OUT-OF-SCHOOL EDUCATION AND TRAINING FOR YOUNG PEOPLE

18. Even where national education systems are adequate for the needs it is generally recognised that out-of-school education and training are extremely useful and desirable. The aim of these systems is to provide young people who are mainly outside the school system with the technical skills and other personal qualities which will better fit them for employment. Such programmes may also in certain circumstances seek to organise the application of these skills by direct involvement in development work such as roadmaking or bridge-building or by participation in settlement schemes.

19. The mere provision of training, plus certain specific projects to absorb trainees, cannot solve the needs for acceptable employment of the growing numbers of young people out of school. Essentially the need is for comprehensive development policies aimed at raising the level of rural living, since it is this sector in most developing countries that is capable of providing opportunities for employment in the immediate future.

20. There are four categories of young people for whom out-of-school education programmes are needed:

For the unschooled, who are likely to be still fairly closely identified with traditional life, the need is for the development of their skills in relation to their traditional employment. For this group, work-oriented functional literacy programmes can be of the highest value, particularly when backed up by short courses on specific themes in rural training centres.

The early drop-out from primary school is in the same broad category as the unschooled youth, except that his brief educational experience may have aroused his aspirations for wage-earning employment and he may therefore be more likely to leave the rural area. In this case, the need is for skills training programmes and courses which will build upon and ensure the maintenance of his elementary literacy and motivate him towards rural development.

The primary school leaver is often distinguished from other categories of young people by exaggerated and unrealistic job aspirations shared by himself and his parents. He is strongly motivated, therefore, to leave the rural areas for the towns where he might hope for acceptable employment. The underlying reason for this is the combination of low rewards and inferior living standards associated with rural life and the apparently attractive amenities which the urban areas offer. As the townward movement gains pace and the possibilities of acceptable employment there diminish, dangerous social and political tensions arise from the frustrations suffered by this group. These tensions can be tackled by various training programmes which aim to provide a combination of skills, training and civic education which, it is hoped, will motivate primary school leavers into directions profitable to the national development effort. The numbers that can be absorbed by such programmes - national youth services, settlement schemes for young people, special vocational training centres - are, however, small in relation to the size of the training need and generally somewhat expensive as individual enterprises. No significant impact can be made on this problem until there is an all-round development effort in the rural areas, including the provision of improved communications structures and other material amenities, increased rewards for rural people relative to townspeople, and training programmes which will appeal to young people.

For young people still in school out-of-school programmes can usefully supplement the formal school curriculum. Various youth organisations have long provided activities for young people in school. Newer youth organisations with an emphasis on development

are also engaging themselves in this way, for example, the Malawi Young Pioneers or Community Service Volunteers in Britain. This is an encouraging trend. In particular they provide opportunities for learning technical skills and encourage participation in appropriate forms of community service. In addition, they provide opportunities for social activities.

21. An activity not to be neglected which can further development is the establishment of Young Farmers Clubs. The impact of Young Farmers Clubs in arousing interest in agriculture represents a very special contribution to development, providing a foundation upon which most specific agricultural training programmes can be based at a later date.

Appropriate forms of training

22. In determining the forms of training appropriate for rural youth, two categories of training activities can be identified:

- (1) the training and establishment of improved farmers;
- (2) training to promote various non-agricultural crafts, skills and services in the rural areas.

23. Various approaches are possible in both categories. These include training in purpose-built institutions confined to a specific activity, training in multi-purpose institutions, training attached to "masters" (whether in farming or in artisan crafts), training in the family situation. An effective extension service is essential to the success of those aspects which involve the training organisation reaching out to the trainee. For agricultural training, there are already such services although almost invariably these are undermanned.

24. There is an absence of a parallel service concerned with the promotion of small crafts, industries and businesses in rural areas, a small industries extension service. The establishment of such a service by governments would provide immediate returns in terms of rural development. In view of the importance of building up the training capability of existing rural master craftsmen, in-service training programmes for them, coupled with the necessary system of loans which they might need to develop their facilities, can do much indirectly

towards satisfying the training needs of young people out of school.

Content of courses

25. In view of the rapidly changing social and economic situation in many countries, a broadly based approach to the planning of course content is desirable, with emphasis on training in practical skills. Such training must be related to the changing skills demands resulting from technological advance. In addition to the necessary practical component in courses, great importance was seen in a non-technical element which should be concerned with civic education in the broadest sense. Young people should be made aware of the main features of the economy and society in which they are living and awakened to the kind of contribution they might make to national development.

26. Courses for both girls and boys should have much in common. The particular requirements of girls should, however, be taken into account through the provision of courses in home economics, child care and special skills required for local job opportunities for girls.

National youth services

27. These organisations have not been functioning long enough to show the distinctive contribution which they might provide in meeting the needs of young people in the countries where they operate. They vary greatly in objectives, training approaches and content of courses but have some features in common. National youth services are relatively costly. Because of this it is unlikely that they can deal with more than a small number of those in need of training. The particular strength of the service should be in the training of young rural leaders, technically skilled above the average and highly motivated towards the development of the rural areas. Such training can also instill a sense of national consciousness into young people of widely differing communal backgrounds, thus providing an educational element which hitherto has been confined to those young people fortunate enough to gain access to the higher educational echelons, or had the privilege of taking part in Outward Bound and similar courses.

The consequence of training

28. Systematic follow-up must be an integrated part of any training programme. It should preferably be carried out by the original training agency which should be obviously best aware of the qualities which it wishes to see in its former trainees. The training agency must, of course, co-operate in this with the various specialist advisory services which are in regular contact with rural communities. The purpose of follow-up is to ensure the application in the working situation of the skills which have been taught, to obtain information from trainees on problems encountered so that the training course might be appropriately modified, to introduce new techniques, and to provide data upon which the need for refresher course can be assessed.

29. Follow-up must be concerned with more than practical, technical skills. To ensure the application of these skills, what is also needed is guidance on such matters as business-management, book-keeping, land-law or co-operative regulations. Follow-up activities are thus concerned with reinforcing the contribution to the rural development process provided by initial training.

30. There are other factors which can help to ensure the application of skills taught and which can assist the follow-up process. In the case of programmes for training and settling improved farmers, for example, settlers are likely to strike sounder roots and have a more progressive influence on their rural surroundings if they are settled together in mutually-supporting groups rather than individually. Each group must have in its number suitable and respected leaders, drawn possibly from amongst the trainers.

The urban situation

31. It was argued that much of the problem of urban youth, particularly in developing countries, is a reflection of the failure of measures of rural development to hold out to many young people of rural origin the prospect of a future which is rewarding and hopeful. The urban areas therefore become crowded with young job-seekers who, when faced with failure, often turn to anti-social activities. A two-fold attack on this problem is needed. First, in the rural areas, all-round development measures are necessary in order to produce a progressive atmosphere with which young people can identify

themselves. Secondly, in the towns, specific programmes are required for those young people who have lost contact permanently with their rural background. These programmes would be designed to offer to this fully urbanised element both vocational and social training facilities.

Other considerations

32. Evaluation

Rigorous evaluation by outside bodies not concerned in the operation of programmes can play an important part in influencing governments towards the development of effective programmes for young people. Local personnel should be associated with the evaluation exercise in order to ensure sensitivity to local political and social factors. It is important that care should be taken to formulate the results of evaluation in such a way that policy-makers can readily use them.

Costs

Costs are an obvious constraint on the development of informal programmes. It is important to recognise that out-of-school education concerns several departments of government as well as non-governmental organisations including those in commerce and industry, all of which should recognise their responsibility by direct involvement. It is important that more information should be available about various schemes which have specialised in paring costs and in generating income and employment so as to yield the highest returns on investment in youth training. Investment in training young people must be combined with parallel investment in other directions such as the development of rural infrastructure or the education of adults, in order that youth training may produce its maximum rewards.

Leaders

Three main requirements in the training of leaders are, first, the training of suitable personnel who operate directly with groups of young people at project level; secondly, the need to educate the

established leadership in the need for commitment to rural development, and, thirdly, for the involvement of young people in this process. Youth leadership can be produced by orthodox training programmes from conventional sources, the secondary schools. One source which has been neglected is the natural leadership that exists in rural communities and particularly among young people. Efforts should be made to nurture local leadership from this source. Such leaders can be expected to understand fully and be committed to the local rural situation. This is generally preferable to the importation of leaders from outside sources. Primarily therefore leadership training should be undertaken in the local situation. Experience in other regions and in other countries where comparable work is going on can sometimes be useful.

International co-operation

The provision of technical expertise, volunteers, tools and equipment, will require international co-operation. The contribution from outside must be appropriate to the recipient country whether in terms of the quality of the expertise or the capacity of the tool. International programmes of co-operation must recognise the realities of the local situation in terms of development, employment, finance and technical capacity and adjust their activities to fit the situation.

Since many departments of governments are involved in out-of-school education within particular countries, it is important that in each country a single co-ordinating agency should be set up through which aid to the out-of-school sector may be channelled.

THE EDUCATION OF ADULTS

33. Adult education includes a wide range of courses and educational activities, formal and informal, intended to enable adult populations to improve their general educational or cultural levels or to learn or improve upon their technical skills. It is a vital element in the development process, providing the understanding as well as the technical capacity essential to full human involvement in development.

34. In rural areas, adult educational activities fall into two main groups. The first aims at raising the cultural and intellectual levels of rural communities. The second seeks to promote in rural communities the skills and motivation to make a contribution to rural development.

35. The former has a vital role to play where the traditional culture is under pressure from modern forces projected through the mass media, the schools and other forms of communication. In such circumstances there is a danger that much that is valuable in the traditional culture will be thoughtlessly discarded, or alternatively that traditional forces in a community will become stubbornly committed against the processes of social change. Adult education can help to reconcile traditional and modern standpoints by involving the community in the new processes and explaining these to the people. In a practical sense, adult education can help to preserve those traditional skills which can still play a valuable part in a rural economy in process of modernisation.

Courses of an academic nature

36. Adult education of an academic nature also has a role to play in many rural communities where in the past there have been incomplete educational systems and where therefore there are substantial numbers who might have been able to profit from continuing their education but who had to drop out from school prematurely. Furthermore since in rural areas social provision and intellectual stimulus are relatively lacking in comparison with urban areas, adult education has a special contribution to make in enriching the quality of rural life.

Community education

37. Activities designed to raise the level of living of rural communities centre upon practices related to better living standards, to improved health and hygiene, to the care of children (particularly in their early years), to the production of better quality foods and better nutrition, to improved husbandry and the processing of agricultural produce, to improved business and management techniques, indeed to the widest range of activities which affect the life of rural communities.

38. The effect of education in these areas is generally to produce changes in attitude. Education itself cannot give rise to the economic activity necessary if the changes in attitude are

to bring discernible returns in development terms. If they are to yield the best results, therefore, adult education programmes of this nature should be part of a package of rural development activities designed to change not only the attitudes of rural people but also the material environment in which they live.

Literacy

39. Literacy has a special part in the process of community education. Various approaches have been devised and practised throughout the world. Generally, there is now a move away from the traditional approach to literacy which advocates literacy for its own sake and seeks to achieve it through some form of mass literacy campaign. The swing away from this approach is explained by the inability of certain rural communities to relate their new-found literacy to any practical end within their own experience and by their difficulty in maintaining literacy when follow-up reading materials are almost non-existent. The more recent approach to literacy advocates the selection of groups for intensive treatment so as to improve their skills and production capacity. This seems to make more economic sense in that it relates to a precise end and the participant can readily perceive the practical gains that will accrue to him through his taking part in a combined literacy and technical training programme. This approach to literacy work has been strongly promoted in the current Experimental World Programme of UNESCO. Because, however, such programmes are aimed at specific groups and have a heavily vocational bias, there is also a need for other approaches to literacy of a more general educational nature of including elements of civic or community education. Ideally all types of literacy programme should play a part in an overall plan for rural development which can potentially involve the whole rural community.

Technical and vocational training for adults

40. In the main such programmes are likely to be concerned for several years to come with raising the level of basic farming skills. It is important, however, that such programmes should develop and work from the existing level of skills within the rural community, rather than seek to impose alien standards of limited applicability. Training on the job in the workplace, whether of small farmer or of rural artisan, is especially valuable in order to convey to the trainee the understanding that the programme applies in his own personal

situation. Rural training centres with a residential capacity have a useful role in backing up training programmes which reach out to the rural dweller where he works and lives.

Family planning

41. The adult educator has a vital contribution to make in spreading among rural communities the understanding of the need for and the practice of family planning. Too often the spread of family planning is regarded as a purely technical matter and the province therefore of health departments. In fact, such exercises can be easily invalidated by a failure to take into account the understandable suspicions of the community at whom the programme is directed. To bring this about, technical personnel and adult educators must work together in the planning and execution of the programmes.

Educational media

42. Both the simpler and the more sophisticated media can play an important part in the education of adults in rural areas. In the former category, low-cost, locally produced media and materials are an essential reinforcement of the face-to-face work of those involved in communication with adults, especially when transference of factual information is involved. Some of these media can be manufactured locally and tailored to local requirements, using local materials whenever possible. The making of teaching aids should be an essential component in any training course for those working directly with adult learners and the means for making simple aids should be available locally to persons engaged in adult education. This local provision must be reinforced by the resource of a national centre which can call upon the professional expertise necessary for pre-testing, action research and production of the more complex forms of media.

43. Radio has assumed special importance with the advent of the transistor set. Broadcasting is a complex and technical business and calls for professional training. Ideally programmes intended for specific areas should be locally produced. Where they are produced centrally it is essential that the production staff should be in continuous contact with the regional and local situation.

Evaluation and continuous assessment

44. There is need for continuous assessment of programmes to ascertain their effectiveness in attaining their stated goals and supply data to the programme planners in the light of which improvements can be worked out. Continuous assessment should be built in to any adult education programme aimed at community improvement. Long-term rigorous evaluation is important to policy-makers for assessing the value of particular programmes and to provide data for comparing the benefits of different approaches.

45. The mass media tend to be costly both in terms of material facilities required and the expensive professional expertise involved. It is therefore of the greatest importance that careful evaluation should be carried out of all ventures in these media so that the benefits in relation to the costs can be clearly seen by those involved in policy-making.

The role of women

46. The trend towards equal participation of men and women in all aspects of adult education work should be encouraged. The final objective should be the full mobilisation of the joint capacities of men and women whilst allowing the special capacities of each to develop to the full.

AGRICULTURAL EDUCATION

47. Agricultural education was viewed within the overall context of rural development. Agriculture itself, being the principal occupation of the majority of the population in developing countries, inevitably has an important place in overall development planning. To stimulate the process of agricultural development is more than simply a matter of bringing science and technology to bear on existing systems of rural land use. The human element is also of primary importance, as is the development of various essential supporting structures. Education and training, motivation, the development of rural infrastructure and services, the marketing and pricing system, all have important parts to play in an integrated development process. All of these components are in effect inter-dependent. The ability of one element to achieve results depends upon the efficient functioning of the others. The complexity of the process of improving agricultural practice must never be underestimated.

48. The main groups of people requiring agricultural education and training are (a) the practising farmer, (b) the field worker or extension agent, (c) the professional support worker, the agricultural technician or agricultural scientist.

The education and training of the practising small farmer

49. Training programmes must be shaped to meet the differing needs of small farmers. These vary according to the farmers' level of development, which may be still that of subsistence agriculture, or at a transitional phase moving towards the cash economy, or at the stage of a specialised commercial farming. The nearer a farming community is to the subsistence system, the more difficult are the problems of getting agricultural development moving.

50. At the level of the subsistence or near subsistence farmer, the main problem is that of motivation. A training programme that seeks to communicate various elementary procedures which can bring about substantial improvements in the situation of the subsistence farmer can be effective only if the farmers are motivated to respond to the programmes. The special needs which concern the farmers must therefore be identified so that training can be directed specifically at these in the hope of evoking positive response. This process of identification demands knowledge of the local community on the part of the field worker and in turn demands that the local community should fully accept the field worker. Important questions of attitude arise which must be taken into account in training programmes for field workers.

51. In approaching largely subsistence communities, various strategies are possible. In particular, it might be important to direct a special training programme at groups or individuals who are known to be changing in their traditional attitudes to agriculture so as to create within the rural community a body of improved farmers who can demonstrate the effects of better agricultural practices. The various media of communication including written and illustrated materials are essential in imparting information to modernising farmers and in bringing about positive responses. In this connection also, selective and intensive literacy work, if it is related to the rural environment and to particular agricultural processes, can facilitate communication and raise agricultural productivity.

52. The primary task of communication with small, or near subsistence farmers must be carried out in their working situations in conditions which are understandably real to them. There is, however, an important supporting function in the communication process for residential rural training centres which farmers and their wives can attend for short courses on specific topics. These courses reinforce a particular message or process once indications of changing attitudes can be seen.

53. The essential ingredient in promoting the development process among near subsistence farmers is the quality of the leadership available locally. The quality and skill of the field worker is therefore crucial. Since the needs of communities at this level are diverse, and since the growth-points for development activities may be found anywhere within this wide range of needs and interests, the field worker at village level should preferably possess a variety of skills rather than particular expertise in, for example, agriculture alone. Often, however, it is the personal qualities of the field worker - his maturity, his ability to inspire confidence - which produce results. Ideally the need is for development teams which possess various skills. If, as is frequently the case, financial reasons rule this out, field workers operating independently should have regular in-service training courses in order to keep them abreast of recent developments.

54. In view of the importance of women in many traditional agricultural systems, it is important that they should not be overlooked in any development and training programme. Women engaged in subsistence farming need help as much as men to develop agricultural skills. Women also have additional needs related to their role as home-makers which should be catered for. As the agricultural development process proceeds, the roles of men and women in the more commercialised agricultural system tend to become more clearly differentiated and provision may have to be made for specific training needs.

Farm settlements

55. Because of the heavy expenditure that they often involve, settlement scheme proposals should be rigorously examined and their potential worth established before they are launched. Such schemes involve the building of new communities as well as the adoption of systems. It is essential that the co-operation of settlers in such schemes be attained;

community education and training are therefore key elements of these programmes. The purpose of this education and training is to gain the commitment of the settlers to the scheme and to provide settlers with the diverse skills needed to exploit it to the full. Training programmes should therefore include, in addition to instruction in agriculture, elements of accounting, budgeting, health and nutrition, the use of credit, and cultural and social provision.

56. Careful evaluation of the costs and benefits, and of the social advantages of such schemes, is essential to provide guidance for future settlement policy.

Training the extension worker

57. Initial training of extension workers should be broadly based. The training programme should include a grounding in relevant agricultural theory and practice, elementary business techniques, a knowledge of health and nutrition as they relate to the rural situation, and an introduction to the principles of social psychology and elementary communication skills and techniques. In addition regular in-service courses are necessary to keep workers in the field aware of new developments.

Training the agricultural technician

58. A close understanding is vital between the front-line field worker and the support worker in the laboratory. Each must understand the problems and potentialities of the other. Whilst the technician needs a rigorous training in his particular specialism, there would be great value in an initial training year in which the training of extension workers and technicians overlapped.

Teachers of agriculture

59. Many of those engaged in teaching in agricultural colleges, farm institutions and farmer training centres have had no training as teachers, and rely purely upon their specialist expertise. This is a major weakness which should be remedied. The organisation of courses, possibly by university departments, in which such personnel would be able to spend some time on the principles and practice of teaching, as well as other activities which might improve their role as communicators, would be a valuable innovation. An inducement through the

award of certificates and suitable incremental credit might help to promote such courses. Equally, for potential instructors undergoing degree or diploma level studies at university, Education courses are necessary. Indeed the possibility of running such courses jointly with teacher training courses geared to the orthodox school system would afford an excellent opportunity of promoting greater understanding between each group.

Agricultural scientists

60. The agricultural scientist must have breadth as well as depth of knowledge. It is therefore necessary that, in addition to developing excellence within the particular subject specialism, degree level studies in Agriculture should include courses which will equip future professional agriculturalists with a broad view of the role of agriculture in society. Courses in aspects of the social sciences and in agricultural economics would help to fill this need.

Continuing training

61. At whatever level, from the field worker to the research scientist, initial training is the beginning of training and throughout any working career in-service training must be a continuing feature. A particularly difficult phase in most careers comes very soon after the initial training period is over and the young worker is confronted with the realities of the working situation. It is important at this stage that his initial training should be speedily backed up with in-service guidance and that more experimental personnel should lend their support to ensure the firm establishment of the young worker. Training must be recognised as a responsibility which all share.

National Councils for Agricultural Education

62. As in many other fields of professional activity which involve workers with skills ranging from those at a relatively modest level to those requiring complex knowledge and understanding there is need for co-ordination of the education and training facilities provided. The establishment of National Councils for Agricultural Education would inevitably do much to provide this co-ordination and assist governments as sources of sound advice in respect of the design and implementation of policy.

National Councils for Agricultural Research

63. The provision for agricultural research in most countries at the present is shared among various institutions, some under the authority of Ministries of Agriculture, others under the control and direction of universities, still others, in some cases, supported by commercial organisations. The establishment of National Councils of Agricultural Research would undoubtedly provide the means for better co-ordinating research effort in agriculture, and could well lead to the exercise of influence as authoritative as that exercised by Medical Research Councils.

Agriculture in schools

64. The primary school is not the place for vocational training in agriculture. The most that can be hoped for is that attitudes sympathetic to rural life could be induced in children through, for example, environmental studies. At secondary level, it is possible to handle agriculture as a serious subject for study. In many developing countries there is a strong motivation on the part of secondary school students away from agriculture. It would therefore be of great value if experiments which have been successful in introducing agriculture into secondary schools were documented and the information widely disseminated. Clearly, with the growing interest on the part of governments in promoting agriculture at all levels including the schools, it is urgent that a systematic reorganisation of curricula, teaching methods and textbooks should be undertaken with the hope of promoting the interest in agriculture that is widely seen to be necessary. One means whereby interest in agriculture might be stimulated would be by the introduction of national and community service programmes for young people. Information about the working of such programmes would be of value to those responsible for agricultural policies.

The projection of the role of agriculture in national development

65. Enlightened and understanding co-operation on the part of the general public is basic to the success of agricultural development programmes. All institutions and agencies have a responsibility in the building of such understanding. Ways in which this can be brought about include open days and agricultural shows; courses might be organised for senior personnel not involved in agriculture; at the top level, conferences and seminars fulfil the same function. One of the

objectives is to establish appreciation of interdependence of town and country and the general understanding that balanced national development must include the development of a sound rural base.

SOME POINTS OF CONTACT

66. The schools, work with young people, work with adults, and the communication of the fundamentals of improved agriculture, all in their differing ways are focussing on the difficult problems of getting rural societies moving, in particular of introducing ideas, skills and attitudes to rural people so that together with other development activities the many problems of economic backwardness can be overcome. Too often, perhaps, these four sets of activities have operated apart from each other. Yet clearly, their interests overlap at many points and they may have much to gain from working together.

The attitudes of young people towards the land

67. For several decades many young people with and without formal education have reacted against life in rural communities and sought employment in the towns. This phenomenon has led to the drift from the land being regarded as essentially an educational problem. One consequence of this has been attempts in various ways to introduce an agricultural vocational element into the village schools. This has proved ineffective because of the physical immaturity of the children, the inadequacies of the teachers made responsible for agricultural education, and because the schools have a prior responsibility in establishing the basic skills of literacy and numeracy. Furthermore, social practices in relationship to land tenure and the status of the young in traditional society generally prevent independent farm practice being taken up by the young school-leaver. Another factor of importance is the attitude generally adopted by parents in respect of the children they send to school, namely that the school automatically involves qualifications for work of a non-agricultural character.

68. At the conference the agriculturalists and educationists agreed that the primary school should not become involved in teaching vocational agriculture. The task of the school should be to familiarise young people with the rural environment in which they live, promoting in them through rural science and other courses an interest in the processes of nature and the potentialities of rural living. These positive attitudes might

be built upon by specific out-of-school training programmes whose task would be greatly eased if it were not necessary, as is so often now the case, to combat trainees' antipathy towards the land.

69. The content and methods for the teaching of agriculture at this level must be related both towards requirements for post-secondary vocational training in agriculture and towards developing greater understanding of the inter-relationship of agriculture and other branches of the national economy.

70. One way of furthering interest and understanding of agriculture as a possible career would be the development of out-of-school programmes of community or national service directed to develop work in the rural areas. Such activities would also contribute to the general understanding on the part of the community of the inter-dependence between town and country.

71. Unless steps along these or similar lines are taken, the increasing numbers of young people frustrated in their attempts to seek acceptable employment will be a source of major social upheavals of a disruptive character.

The community school

72. The school in terms of plant and skills is a major resource in many rural communities. It is important that the fullest use should be made of that resource so that its value is felt not only by the children during the few hours of the day when they are in attendance but also by adult and youth groups at other times. The school should be in the fullest sense a living part of the community. In normal school hours, it is at the service of the children. After school, it should be a focus for a wide range of community and adult educational activities providing a meeting-place for rural people to pursue their social and educational activities.

73. In the training of teachers attention should be given to their role as progressive agents within the community. This is particularly important in respect of those who will work in the rural areas. Classroom teaching places a heavy burden on the individual teacher. The possibility therefore might be explored in developing countries, as it has already been in certain more affluent countries, of attaching youth and community workers to village schools where they are given a

lighter teaching load and required to devote a proportion of their time to youth and community work.

Community service and adult education

74. Secondary school students, having a comparatively high level of general education and having fairly long vacations at intervals throughout the year, constitute a valuable resource which might usefully be brought to bear on the adult education needs of rural communities. The involvement of such students in traditional literacy work is not new, although, among many modern authorities on literacy who advocate the more work-oriented approach, what has been called the "each one teach one" approach finds little favour. It is now regarded as important that the literacy teachers should themselves be thoroughly competent in the technical or vocational skills to be taught to participants in the programmes. Secondary students can be of more practical value in work of interviewing and data-gathering. Secondary school students, having a knowledge of and entrée to the rural communities from which they come can with a minimum of training be used in this work.

Teacher and instructor training

75. There is a general feeling that all personnel engaged in communication with rural communities should share at least part of a basic training course. Trainee primary school teachers should understand the agricultural problems of their communities and be acquainted with some of the basic techniques that can be adopted to deal with these. Extension workers and community development workers should appreciate that their task concerns more than the mere transmission of technical information. They are also concerned with social and attitude problems and require an understanding of adult learning processes and difficulties. An integrated basic training year for all engaged in communication with rural communities would allow the sharing of expertise which has hitherto often tended to be compartmentalised in special training establishments and would go far towards promoting the integrated rural development policy which is generally agreed to be necessary.

Educational Media

76. Attention has already been drawn to the place of the educational media in the schools in the rural environment (paragraph 16) and in adult education (paragraph 42). It is

sufficient here to reiterate the importance of identifying the skills and resources needed on the one hand for the field worker, whether he be classroom teacher or extension worker, in respect of his particular audience and training situation, and the skills and resources required centrally in respect of the more complex problems related to the more sophisticated teaching and learning materials, including the use of such media as radio and television, and the production of programmed and taped audio visual materials. For the former, training in certain simple techniques and the provision of relatively simple material in local centres is essential. For the latter, a national or regional resource centre staffed by persons with the necessary special skills is equally necessary. The latter type of centre should also be a resource for supporting and reinforcing the work in the rural centres. It is essential that the provision of these facilities should be co-ordinated to prevent unnecessary overlapping of effort.

Evaluation

77. It is agreed that in the formal school situation, out-of-school education and training for young people, adult education and education for agricultural development, it is necessary to provide systematic assessment and evaluation of the work being undertaken. In the school situation, a swing away from the terminal testing of attainment towards continuous evaluation will reveal special aptitudes and shortcomings in individuals. In the other areas, where the project approach is used, the need is for evaluation to establish the social impact and economic benefits in relation to costs, and to assist the policy-makers in the assessment of past efforts and the identification of new lines of development. In all programmes there should be appropriate forms of continuous assessment to provide the feedback necessary for the modification and improvement of the programme. In the whole area of evaluation an opportunity presents itself for co-operation through the exchange of information and possibly in the provision of an inter-departmental service. In view of the importance of evaluation of the effect of media, the possibility might be considered of establishing local educational services centres.

78. The provision of appropriate education for the rural communities of the less affluent countries presents a range of different problems. To stimulate development among these communities is to open the way towards national prosperity, physical well-being and satisfying employment for the great

majority of the populations of these countries. Admittedly, the development process involves much more than education, but the spearhead of the attack on ignorance, which is the essential precursor to other aspects of a development strategy, is education. It can provide the skills, the understandings, the inclination towards progress upon which the other components of a development programme can be built.

79. It is hoped that this analysis of the role of education in rural development will assist in the identification of new lines of action and point the need for further investigations to be undertaken into particular aspects of educational programmes for rural communities.