

EDUCATIONAL TRAINING MANUAL No. 3

EDUCATION STAFF TRAINING DEVELOPMENT PROGRAMME

NON-FORMAL EDUCATION AND DEVELOPMENT



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NON FORMAL EDUCATION AND DEVELOPMENT

1. Introductory Framework

The beauty of Africa lies in its complexity, in its diversity and heterogeneity. African countries are not a homogeneous group because they vary greatly in terms of size, population density, wealth, natural resources, political ideologies, economic structures, cultural and social organizations. In fact, one could describe Africa as a land of villages encompassing the entire continent from Cape to Cairo and from Tananarive to Dakar in that, of the region's total population of 553 million in 1987, some 70.3% lived in rural areas i.e. mainly in villages. Except in Southern Africa, nowhere was the rural population less than 55.0% (See Table 1).

More noticeable in this population was that it was preponderantly young i.e. 45.1 per cent were persons under the age of 15 years and that dependency ratio was estimated at 92.9% in 1987. At the rate of 3.02% per annum, Africa found it very difficult to feed itself, and had therefore tended to rely more and more on imports and food aid from developed countries.

Table 1; (a) Demographic Indicators by Subregion and by
Major World Region: Estimates for Mid-1987

	Population in Millions	Percentage of Total				
		Sector		Age Groups		
		Urban	Rural	0-14	15-64	65-
1. North Africa	128.5	42.1	57.9	42.0	54.3	3.7
2. West Africa	180.0	24.9	75.1	46.9	50.4	2.7
3. Central Africa	63.0	35.6	64.4	44.2	52.6	3.2
4. East Africa	177.0	18.2	81.8	46.4	51.0	2.6
5. Southern Africa	3.5	52.5	47.5	41.6	54.6	3.8
6. Regional Total	553.0	29.7	70.3	45.2	51.8	3.0
7. Developing Regions	3809.3	31.2	68.8	36.9	58.8	4.3
8. Developed Countries	1188.3	72.5	27.5	22.2	66.6	11.2
9. World Total	4997.6	41.0	59.0	33.4	60.7	5.9

Table 1, (b) Demographic Indicators by Subregion and by Major World Region: Estimates for Mid-1987

	Population Growth 'per annum'	Dependency Ratio	Total Fertility Rate	Crude Birth Rate	Crude Death Rate
	Percentage		1/	Per thousand	
1. North Africa	2.59	84.2	5.03	36.5	10.5
2. West Africa	3.26	98.4	6.86	49.2	16.7
3. Central Africa	2.84	90.3	6.03	44.5	16.2
4. East Africa	3.24	97.4	6.80	49.1	16.9
5. Southern Africa	2.59	83.3	5.09	38.8	12.9
6. Regional Total	3.02	92.9	6.22	45.2	15.1
7. Developing Regions	1.94	69.9	3.69	29.4	10.0
8. Developing Countries	0.60	50.3	1.97	15.1	9.5
9. World Total	1.63	64.7	3.28	26.0	9.9

Source: ECA - Survey of Economic and Social Conditions in Africa, 1986-1987 Document No. E/ECA/CM.14/4 March 1988.

This vast population increase was also reflected in the growth of education when Africa experienced a growth rate of 8.1 per cent per annum in the 1970s. However, because of the seriousness of the social and economic problems as manifested in severe famine, drought and swelling number of refugees, education growth fell to 3.9 per cent a year between 1980 and 1985. This decline in school enrolments was particularly noticeable at the first level from 7.3% to 2.6% and at the tertiary level from 13.1 to 7.2% between 1980 and 1985. (Table 2).

^{1/} The average number of children that would be born per woman if all women lived up to the end of child-bearing years and had children according to a given set of age-specific fertility rates.

1970	34,776	29,371	4,454	401
1975	49,005	40,281	7,910	814
1980	74,297	59,238	13,685	1,374
1985	90,076	67,469	20,613	1,944
1986	93,672	69,223	22,365	2,084
1987	96,512	70,023	24,255	2,234
1988	100,628	71,844	26,389	2,395

	Percentage Annual Growth Rate			
1970-1980	8.1	7.3	11.9	13.1
1980-1985	3.9	2.6	8.5	7.7
1980-1987	3.9	2.6	8.5	7.7

Source: UNESCO Statistical Yearbook 1987 (Paris 1987) and ECA Projections for 1986-1988 - March 1988.

A fall in enrolments at all levels of the educational system resulted in a concomitant drop in enrolment ratios and in the growth of the teaching force at all levels. There was also another fall - that of the quality of education itself consequent upon the fall in educational/instructional quality enhancing resources such as text books, educational media, teachers and indeed laboratory and workshop equipment which could not be obtained for lack of financial resources which was not made of available to education; indeed as a result of Africa's deteriorating social and economic conditions. But whether the decline in the quality of education is real or inferred or has contributed to the worsening social and economic conditions is a matter of debate. Yet one can argue that over the last three decades, African leaders, academics, scholars and intellectuals, all products of the education system have been unable to develop and "African Theories (and Philosophy of Education) Development" which would have assisted the continent to develop and be responsive to development needs and the accompanying (contend with) forces of change. Instead, there has been a lot of adaptation, adoption, and transplant of Western and Eastern Theories of Education which have proved unsuitable for the development of the region's educational system.

While the present educational system should not be held solely responsible for this malaise, it cannot escape the blame for being a party to this devise. Indeed in developing countries formal education,^{2/} together with its complement of non-formal education have often been charged for dissociating themselves from the realities of African life, inspite of their having expanded massively and taking a large share of national resources. It is argued that thier quality has declined greatly and their contribution to national development often questionable. The argument goes that education received in primary and secondary schools in Africa has often been counter productive to development because:

- it is implicated in nurturing elitism and the exodus of talents from rural to urban areas;
- it orients its output towards the small modern sector concentrated in the towns and cities but already hard pressed to absorb the influx of young labour-force entrants without immediate useable knowledge and skills;
- its curricula and structures are patterned on colonial models and thereby tending to ignore the real needs of the rural people and thus disorienting its output from agricultural and manual work or blue collar jobs; and
- its research activities are geared towards publication in learned journals in developed countries and not towards solving national development problems, and
- it is also implicated in perpetuating the thorny issue of brain drain for not having high quality post graduate programmes in Africa.

Some of these assertions are well founded; others may be subject to debate. However, they all help to pin-point one central issue that formal education cannot be easily prescribed as an elixir for African social and economic ills and above all it has constrains as a dynamic force of national development. Similarly, non-formal education programmes do no more than "cool out" the aspirations of rural people (over 70% of the continents population) for upward social and occupational mobility. It is this cooling out effect which is the focus of this analysis in relation to national development as regards:

^{2/} Non-formal education here refers to any organized educational activity outside the established formal system whether operating separately or as an important feature of some broader activity, intended to serve identifiable learning needs of clientelle and their objectives. This is different from formal education which is the hierarchically structured, full-time chronologically graded system running from primary through tertiary level, including a variety of full time technical and professional training and controlled by a government ministry (often education).

- the objectives and functions of education in general;
- the dialectical relationships between education and development;
- the global problems and their linkage with the problems of education;
- the effects of education on development;
- integrating non-formal education programmes in national development;
- rural development strategies as they relate to non-formal education; and
- propose and restate measures and strategies for making non-formal education a more effective tool of national development.

2. Objectives and Functions of Education

In examining non-formal education in relation to development, it may be necessary from these introductory remarks to review the objectives and functions of education in general but with specific emphasis on non-formal education.

From the cultural point of view, it is possible to draw three theoretical distinctions of the objectives of education. The first objective manifests itself in the education of the worker wherein a person is seen as the object for which instruction or training in some useful skill is of paramount importance. If a person fails to get such education, he/she becomes less productive in society. The second object leads to education of the citizen with the individual as the subject and being considered as a member of society or of a community. In this case, education and culture have an instrumental value and thus education must prepare the individual for a role as an effective member of society and as a citizen within the community.

A third objective is that of education of the human being wherein the individual is a unique person and a multi-functional developing subject playing different roles during an individual's life time. In this case, education can be seen as a value in itself so that it should train people to make choices and should provide opportunities for contacts with many cultural values, ideas and products and should allow for self-development. However, because the aims and processes of education are so complex, and complicated, no one institution can prepare individuals for these various roles. There is thus the need for complementarity and supplementarity of institutions in the preparation of persons for a productive life. This also goes for the three modes of delivery of education.

Generally, one can assign a number of functions played by education. First education by its practice of establishing a community of teachers and learners - schools, colleges etc. becomes a reflection of the society it serves and should convey to the rising generation the accumulated desire for developing individuals as part of a society for acquiring values and mission of that society. This is the socializing and culture-value, system transfer function of modern education

which is not different from that of traditional or non-formal education. In modern times, this is regarded as a conservative function which does not meet the aspirations and enthusiasm of many nations. In spite of this, a point which ought to be emphasized is that education plays a vital role in the socialization process and in shaping the personality, systems of values and attitudes of individuals. It determines the possibilities of communicating with other people; helps in the fulfilment of lower, while shaping the higher needs of the human being and contribute to the development of the life style of the individual. And that through cinema, television, video and the reading of books, magazines and papers, education contributes immensely to a nation's culture.

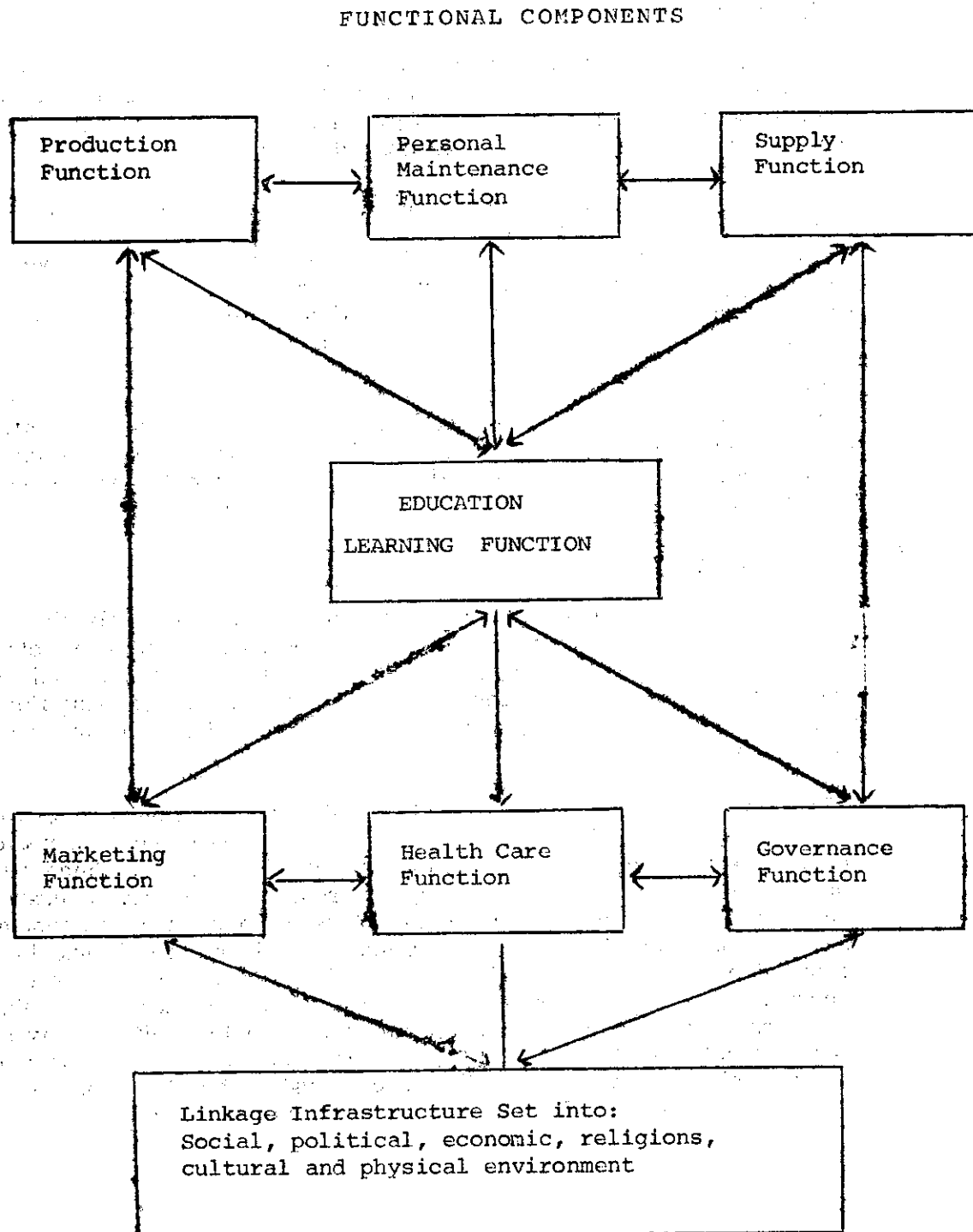
Secondly, education serves as an instrument for purposely initiating, controlling and directing change in society. Many nations have used education (e.g. the People's Democratic Republic of Ethiopia) as a lever for bringing about change, and perhaps this is so because through education, people are able to apply knowledge, skills, attitudes, values and information learnt or acquired more productively. In this regard, the application of knowledge, skills and attitudes to productive activities is central to development. This is the innovation which is concerned with freeing individual blinkers, enabling them to think divergently, logically and independently; to identify and solve problems; to take responsibility for initiating change without unnecessary limitations of self development.

These three functions of education underscore the point that non-formal education is essentially a complement and supplement to formal and informal education in the home, community and society. These functions also cut across the three delivery modes of education as they all promote social mobility and continuity in society and nation.

With respect to non-formal education in relation to rural communities (which in this paper may be termed rural social systems^{3/}). it is possible of to characterize seven functional components, related to each other through a linkage infrastructure, and all set into social, political, economic, religious, cultural, and physical environment. In practice, the seven functions include supply, production, marketing, personnel maintenance, education, research, health care delivery, and governance. All rural activities - social, economic, cultural, political etc. - may be identified as belonging to one or more of these functional categories with education i.e. learning, playing a major role if not a central role. In effect, none of these categorized functions can be adequately performed without the added element of education through whatever more of delivery; formal, non-formal and informal. For instance, according to the supply function, one needs to know where the goods are to come from and how to store them. That in itself is education, whose relationship with other functions is illustrated in Figure I.

^{3/} These are human groups which live in rural places and which tend to be small groups in relative isolation from each other and from larger groups and thus may be labelled rural social systems.

Figure 1: The Rural Social System and its Environment



The importance of education in enhancing these functional components may be highlighted in a detailed analysis of these functions:

(i) Supply Function

This has both the means and the end. The latter provides the production function with its inputs, whereas the former includes aspects such as storage, exchange of goods and information and transportation of such inputs as seeds, feeds, fertilizer, credit and raw materials.

It is the physical environment which provides the essential elements needed for rural productivity such as land for farming, water, trees for buildings, and as a source of fuel. However through involvement with supply rural people learn about seed, feed, fertilizer, credit, tools, land, storage, about the climate conditions, soils, minerals, and the varieties of plants and animals which do well in their area.

Learning activities regarding these elements consist mainly of personal experiences with the regularities, contacts and accidents of nature. And as education opens the rural social system to a more specialized supply function, a higher proportion of supply elements tend to come from the outside system i.e. from urban to rural areas.

(ii) Production Function

Production function relates to the manipulation of the supply elements to create goods which can be marketed or consumed. Activities related to production include preparing fields, raising crops and animals, harvesting, cooking and processing food, drawing water, clearing things, making clothes, weaving, construction and building, making tools, equipment and implements etc.

Learning related to production often takes place through repetition, guidance and practice, observation, play, experiment, discussion, demonstration, personal explanation and various media. Since rural people spend most of their energy in production activity, education, particularly informal and non-formal education plays a very important part in the execution of this function. In this regard, it should be emphasized that the goal of the production function is to create the goods needed by the system. To do this it is necessary to combine such resources as land, labour capital and technology with energy and the elements of the supply function. In this regard education plays a vital role not only in the rural social system but the urban areas, as well for making people production-oriented in their activities.

(iii) Marketing Function

Marketing, be it in rural or urban areas means the selection, movement, trading and arrangement of produced goods for storage, trade or consumption, including valuing goods, counting and bartering, book-keeping, use of money when substituted for goods, and issuing credit to customers.

The ultimate goal of this function is to dispose of the output of the production function whereas the means for achieving such include direct consumption, as well as storage, exchange, transportation and processing of the output of production.

Through the various modes of education, a person learns about market forces, valuing of goods, when and where to trade them and how to get the best value for goods produced. This may be done by active participation, observation, experiment or discussion. In all, education is essential for an individual's efficient execution of the marketing function.

(iv) Personal Maintenance Function

In both rural and urban areas there is a lot of individual consumption of goods which may be classified as personal maintenance. In effect, the ultimate goal of this function is to keep the individual in a state where he/she can operate within a cultural context. This can be done through such activities as feeding one self, healthy souls body and mind through sports, recreation sleep, grooming, clean clothes spiritual/religious rites and worship etc. and to this should be added cultural activities such as speech, singing, dance, games, folklore, feasts, rituals etc.

In this regard, education particularly informal education plays a major role in preparing rural communities for the effective operation of the maintenance function.

(v) Health (Physical and Mental) Care Delivery Function

In rural areas, health care among villagers include pre-natal care, nursing infants, feeding small children, repairing damage, administering medicine, and religious/spiritual rites, consoling the grieved and counselling the troubled, public health, sanitation, garbage handling and latrines, use of clean water, food and nutrition, proper diet etc. All these activities call for a lot of education and training in physical and mental health care functions. Villagers need to know about the importance of food diets, nutrition, how to take care of children as well as how to administer medicine even if it is traditional medicine. In this regard, the role of functional education is crucial.

(vi) Governance Function

In any society or community, people employ methods of co-operation and authority in accomplishing their tasks and purposes. To do this, they usually learn the exercise and acceptance of authority, co-operative interaction and self control in each of the activities in the other function components, while at the same time learning the techniques of the activity. Often this learning takes place in the family, the extended kin group, peer groups and the community.

Learning is extremely important in the acceptance of authority, in the linkage relationship between one social system and another and between rural communities and the nation. In fact, development from below has its roots in this function of governance.

(vii) The Learning Function

A human being is a learning organism although such learning can be very structured and formal or less structured and informal.

Often education involves one person helping another to learn whereas other learning can be carried out by the learner himself. The main aim of learning as a function in both rural and urban areas is to ensure that generations understand how things work and to facilitate transactions (communication) among other various functional components. In a more developed society learning becomes both horizontal and vertical so that communication is easily facilitated by such instruments as schools, newspapers, radio, television, newspapers, dance, song, telephone, books, cinema, meetings etc.

In terms of the social systems, the role of education i.e. learning is absolutely crucial, for without it little can be done in the other functions such as supply, health care or marketing. Perhaps of greater significance is the fact that education allows one to learn new skills related to the other functions of supply, production, marketing, personal maintenance, governance, health and care. Because of this linkage relationship between learning and other functions of a rural social system, it is necessary at this point to examine the relationship between education (formal, non-formal and informal) and development in general.

3. The Dialectical Relationship Between Education and Development

In developing countries, perhaps more than in developed countries, the debate continues over the relationship between education and development and the effect of education on development. Certainly it is very difficult to postulate in theory as to demonstrate in practice the effects of education on development. Part of this difficulty is rooted in the unsettled debate over how development itself should be defined and through what strategies it can be attained. More

important is the fact that it is not possible to assess the effects of non-formal education on rural development unless we are explicit about the question: What kind of rural development.^{4/}

"Development" may be defined as an unfolding process or act of advancing components of an object or of a nation through successive stages within a conflicting environment. In the case of a nation, the process, which is usually referred to as "national development", must take place simultaneously within the political, economic and social fabrics of the society. In other words, the process must incrementally bring to an advanced stage the political, economic and social structures, within the context of the people's needs and values.

What is needed to ensure that this process is effective is: (a) designing and pursuing measures which would efficiently generate and distribute to the people needed goods and services; (b) maximizing the use of the nation's resources, particularly human and (c) initiating legislation and institutional framework for ensuring active and full participation of the people in the process.

On the other hand "rural development" is more than the process of "advancing through successive stages" but one which should be viewed as a process of human development in which MAN is both the subject and object and in which the rural population features in the machineries for (i) decision making (ii) economic growth and (iii) national income distribution. Accordingly the process should deal effectively with the national "macro-peopestives" and the constituent micro-grass-roots" contradictions. In the African context, these contradictions are fundamental and could, at times, call for the creation of the new social, political and economic orders.

It may therefore be argued from the definitions above, that the relationship between education and development, particularly rural development, is a dialectical one, that is: one which is nurtured by the glaring contradictions between the education messages and outcomes on the one hand, and rural misery on the other. Indeed by the very complexity of the problems which education is supposed to solve, the development of education must be conceived in an inter-disciplinary context as a factor of multi-dimensional development of which MAN is both the end and the instrument.^{5/}

This approach to development in having MAN both as the end and the instrument underlies the significance of education in relation to development in three inter-related ways:

^{4/} To avoid confusion, an attempt is made here to differentiate between development and rural development (See Annex I).

^{5/} UNESCO - Records of the General Conference - Twentieth Session, Paris 1978 Vol. 1 Resolutions, Paris, UNESCO 1978 p. 23.

- (i) As an activity which sustains and accelerates the overall national development. In this regard, a number of roles may be ascribed to education.

First, education is supposed to train and prepare skilled manpower for active participation in national development. Second, it facilitates the advancement of knowledge in scientific and technological fields. Third, it helps to raise the consciousness of people in dealing with environmental issues and how to contend with the forces of change. Finally, education helps individuals to adjust to changing forces of society, the economy and technology through self understanding and better knowledge.

- (ii) As a basic human need for the acquisition of knowledge, skills, and subsequently facilitating a review of attitudes and values which can be used in daily life and in responding to change and adapting to new situations.. In this regard, education is considered a right and not a privilege to an individual, and as such everyone should have access to it. Thus both formal and non-formal education should serve as essential complementary elements designed to perform this role; and
- (iii) As a means of meeting other basic needs i.e. education influences and is also influenced by access to services that fulfill other basic needs. Such services include adequate nutrition, clear water, shelter, clothing and health services all contribute to the development of education. For instance, better food increases the learning capacity of individuals and health education helps people to prevent diseases and thus improve their learning capacity.

Arising out of the above, it can be said that education is not just another sector of development parallel to agriculture or industry but a pervasive element which must be integrated both horizontally and vertically in all development efforts. In this context, it must cover a wide spectrum of activities, both in content and form, i.e. from basic knowledge to advanced research and from training living skills to highly productive skills. This education can vary from General types of formal education to the most specific kinds of non-formal education, and from simple literacy programmes to the most advanced post graduate research. One can therefore argue that education is as essential for attaining development objectives as training in specific skills is. For instance there is evidence to show the relationship between primary education and agricultural extension on the one hand, and productivity on the farm, on the other. Therefore, it may be concluded that the human factor is central to national development and for that matter a necessary condition, though not a sufficient one, on its own.

From the foregoing, it is important to examine this relationship in two ways: First, the linkage between education problems and global problems; and second, the problems in assessing the effects of education on change in attitudes and practices, and on social and economic achievements.

A. The Link Between the Problems of Education and Global Problems

Education with its essential economic function has a direct impact on production. At the same time, the development of education exerts a lot of influence on all aspects of national activities and on the existence of modern social structures. In Africa, however, a majority of people lack basic education and are mostly illiterate. They have limited access to formal schooling, or some kind of non-formal education. To this effect, literacy programmes, adult education, correspondence education, extension studies, vocationalized training and apprenticeship schemes have featured greatly in countries like Botswana, Burkina Faso, Cameroon, Ethiopia, Ghana, Ivory Coast, Kenya, Lesotho, Malawi, Mali, Nigeria, Swaziland, Tanzania, Zambia and Zimbabwe to name a few.

Yet as the population of most of these countries continue to grow at an annual average of more than two percent, and the demand for education overwhelms the supply of physical and financial resources, the need for supplementation and complementation of education is much more felt. This is further accentuated by the uneven distribution of the limited education facilities and resources, often consequent upon a host of national problems - political, social, economic etc. Thus all these national problems have direct impact on the development of education.

A second link concerns the development of education which is directly concerned with the entire system of modern scientific knowledge gained either through formal or non-formal education. It is to be emphasized that the higher the scientific potential, the higher the level of education and that the rising quality of education contributes to the level of scientific knowledge. In this regard, it is to be emphasized that the policies and programmes for the expansion and improvement of education are seriously constrained by the limited and inadequate resources allocated to them. Non-formal education is often the victim of such inadequate allocation of resources. Yet if illiteracy and ignorance are to be eradicated in Africa, it is essential that more resources should be allocated to non-formal education. How this is to be done in the face of diminishing national resources is not the subject of this paper.

A third link concerns the fact that education possesses important social functions in its contribution to the advancement of the self consciousness of the individual and his adequate evaluation of socio-economic and politico-ideological processes. Yet school inefficiencies keep the numbers and the education received much below what the limited resources do permit and thus there is an attendant low level of attainment. Apart from this low level attainment leading to low productivity due to lack of relevant skills, little provision is made for the majority of rural dwellers to help themselves advance or engage in gainful employment. Education is inadequately equipped to prepare individuals for such roles or no national structures help individuals adequately in personal advancement.

A fourth link is in respect of education removing the contradictions between cultures i.e. between the modern and traditional cultures. In this regard, education is supposed to reduce the cultural gap rather than creating ivory tower academics steeped in theory by alienating themselves from their own roots and being seriously devoid of cultural identity. There are lots of inconsistencies in African education as revealed in the parents' attitude to non-formal education and the expectations of their children; the school leavers attitude to manual work and to working in rural areas; the society's new and unrealistic values; and the communities life styles often incompatible with their incomes, all these have had serious effects on the mentality of school children both in rural and urban areas and on national development efforts.

These inconsistencies and contradictions manifest in the bitterness and rivalry shown in school examinations and achievements wherein most school children resort to selfish means to achieve success. There is also the deep faith in formal education at the expense of non-formal education for the younger generation as an investment and escape from the privations and hardships of rural life and misery. As a result parents are prepared to spend huge amounts of their incomes on the education of their children in search of paper qualifications. This nostalgia about a good education and paper qualifications often along Western lines has led to serious drain on financial resources on the part of many ailing African economies. Text books, equipment and instructional materials have had to be imported in spite of many countries facing exchange and debt problems.

To this should be added the fact that national educational reforms have often not been readily accepted and in the final analysis people have looked at non-formal education in as far as it helps to promote one's chances for a salaried employment or career enhancement. Education therefore is linked with badly-remunerated careers particularly in the public sector and the consequent brain drain of skilled manpower for lucrative jobs in Europe, USA, the Middle East and Asia.

For rural areas, those who have attended literacy, adult education, correspondence courses and other non-formal education programmes find this an opportunity to look for greener pastures in the modern sector.

A final point of linkage relates to the capacity for managing the education sector in relation to other sectors of the economy and the scope for the continuing role or research in national affairs. These appear incommensurate with the complexity and vital role human resources should play as a central element in national development. African education systems do not appear to be well managed, lacking in orientation to national needs; their research at the tertiary level lacking orientation to socio-economic problems; and show a lack of integration between the various delivery modes - formal, non-formal and informal. Indeed, they have been accused of being wasteful and being uninnovative in finding solutions to African problems.

Of greater significance is the fact that both formal and non-formal education are seen as two alternates of a system rather than complementary modes of delivery designed to achieve the same results. All these issues compound to

shape and reshape African mentalities and to determine the effect of education on development. It is this effect of education we examine next.

B. Problems in Assessing the Effects of Non-formal Education

Just as much as it is difficult to postulate the effects of formal education on development, so it is with non-formal education because of the unsettled debate on what development means in Africa and what non-formal education is. There are many who think that non formal education means literacy or adult education programmes and that correspondence education is an alternative route to formal education. Without settling these issues it would be very difficult to analyse the effect of non-formal education on development.

However, the effect of non-formal education on development can be related to the educational process itself: to knowledge gained; to attitudes transformed; and to skills acquired and how these have helped individual and national development. In practical terms, non-formal education as much as formal education, renders a person capable of contributing to national development in the following ways:

- the ability to read and write often enables and stimulates a person to receive and convey information relating to individual and communal development
- the attitudes imparted often lead to greater motivation to participate in development processes and to motivate others to do the same, unless one develops wrong attitudes;
- the communication skills and group discipline inherent in the process of education often fosters a spirit of co-operation; and
- education in general generates a variety of skills directly applicable in productive activities in rural areas.

Non-formal education should be considered effective to the degree to which it has been functional in bringing about change in the levies of rural communities. In this regard therefore, NFE should be integrated with other rural development activities, such as social work, agricultural extension and health and child care. What may not be doubted however, is that education has great influence on such variables as farmers productivity, health, nutrition, household consumption patterns, fertility, political participation, social mobility, life styles and income.

There is no doubt that both formal and non-formal education have powerful influences on attitudes and practices. The level of schooling tends to distinguish participants in agricultural extension and NFE skills training programmes from rural dwellers. Education enables a person to be aware of what NFE programmes exist and then it raises initiatives on the part of the individual to enrol in such

programmes and to develop self-confidence in getting access to credit. Therefore the degree of exposure to education and access to credit are significantly correlated.

Another aspect of the effect of non-formal education is that villages with a generally high level of literacy have a much greater degree of occupational diversification and a greater variety of income sources. Often rural dwellers without proper education or who may be illiterate are likely not to venture into new economic activities. Yet on the other hand, education has been and continuing to be a major factor in depleting rural areas of their enterprising and innovative young population in search of work in urban areas because it prepares them for white-collar jobs and occupational careers rather than direct production activities such as farming and agriculture. Evidence shows that in Ethiopia, over 80 percent of those who attended school chose not to be farmers and preferred to remain jobless or picked bits and pieces of jobs rather than till the land. Only those who had done at least four years of primary education saw no choice but to become farmers otherwise those who had gone beyond the fourth grade did not want to do so.^{6/}

Yet in the case of Ethiopia, the literacy programmes have greatly contributed to participation by the broad masses in grass-root organization, political education, communal programmes etc. without which the aims and objectives of the Revolution could not have been greatly fulfilled. At the same time, it can be emphasized that education has been a major mobilizing factor in political development. It has helped most African nations in changing the outlook and practice of farmers in economic and communal affairs as well as within their families. Whilst such changes may not in themselves or by themselves constitute rural development in Africa, it is difficult to see how any development in this continent could be achieved without the mobilizing function of education.

As regards the effects of non-formal education on social and economic achievements, even the most multivariate analysis convey a very incomplete picture of the effects of formal education on the social and economic development of a country, particularly when increasing the effect of the level of schooling on such variables as income, agricultural productivity, land holding, wealth, etc. Indeed the effect of education on agricultural productivity is weak and so far, it is incomplete and even that of agricultural extension is very much weaker and poorer. One can argue that the education role of extension programmes appears to be that of a mediator function between the farmer and access to credit and agricultural inputs. What seems clear is that the correlation lies in measuring the effect of mediation and not so much the effect of education on productivity.

^{6/} Fassil C. Kiros - Education for Integrated Rural Development in Ethiopia; and Examination of the Problems in Transition - Report of an IIEP Research Project, UNESCO, Paris 1985.

One should however take into account the fact that generally education, let alone non-formal education, is a poorly delivered public service. How then can its effectiveness be felt? But this is no excuse in as far as the education potential for reaching the rural areas is much greater than most government/public networks; because its institutions and personnel are always within easy reach of the majority of rural people. In fact unlike other personnel, eg. mobile clinic personnel, education personnel live among rural people - especially those at the primary and secondary levels.

Perhaps what prevents education playing an effective role in development is lack of integration and a systematic reinforcement of the three delivery modes of education. To strengthen the role of education in rural areas requires that formal, non-formal and informal education should be interlinked.

A more important constraint is the ideological function of the school as a stepping stone to the modern sector and to the higher social status that goes with it. This is exacerbated by the pronounced duration in African countries of the towns and cities having a visible advantage over rural areas in terms of infrastructure, facilities such as schools, hospitals, houses etc. whereas rural areas are denied of these. No wonder non-formal education programmes or efforts to create real rural schools adapted to rural life have miserably failed to impress rural people as dead end and inferior forms of education. These programmes are good and worthwhile in as far as they help an individual to uplift one's social status, otherwise they are a non-starter.

Another constraint is that rural areas are heavily characterized by deeply ingrained power structure and communal divisions which are not easily broken. Unless non-formal education programmes take these into account, integration and co-ordination of rural activities with education cannot be easily achieved. Experience has shown that because of the ineffective delivery mode of education in integrating rural schools with the environment, education has not been very successful in solving rural problems. Often teaching in rural areas are ill-equipped for handling integrated activities.

Since integration is so vital to rural activities and holds promise for improving the effectiveness of non-formal education it is necessary to examine this concept into greater detail. The next section therefore goes into analysing this issue.

4. Integrating Non-formal Education Programmes in National Development

There is evidence to show that something is lacking in unifying the three modes of education as integral parts of a whole. This may be borne out of our inability to recognize the fact that integration is an organizational issue which requires that:

- there should be regular sharing in information between different agencies, bodies, organization etc. involved in education and in development programmes, projects or activities;

- co-ordination between the different delivery modes of education, government ministries/departments, public and private sectors; between the modern and traditional sectors and amongst rural agencies
- unified and polyvalent delivery services at all levels by integrating the services of several separate sectors, and
- establishing/instituting bodies or machineries at various levels - local, subregional and regional levels for the planning, programming, budgeting and implementation of integrative programmes or activities.

Integration has become a serious problem because nations have drawn a strict line between formal, non-formal and informal education as if the three modes were innate structures of education field. Yet these are component parts of a whole system requiring integration in the definition of content, methods of delivery and practices even if the clientele may be quite different. Therefore a cardinal point to emphasize first and foremost, is to forge integration between the three modes of education before one can talk about integrating non-formal education in national development.

Generally, integration of education means a recognition of the fact that education along with other factors is an essential ingredient of national production function, once this is recognized, education (i.e. the three modes) ought to be linked with other factors in their content, quantity, time and space to ensure effective contribution to national development. Only when these factors of production are correctly linked can there be successful integration. No wonder experiments at integration in education at national level have been a failure for lack of linking it with other factors.

Perhaps this can best be illustrated in the way traditional learning and skills acquisition have been unable to cope with the complexity of new agricultural methods in rural areas or with the changing milieu or forms of social organization in rural areas. Although traditional learning and skills acquisition may be seen as integrative mechanisms in a rural setting, they have had little linkage relationships with other factors of production. In the same manner, integrated science, mathematics and social studies teaching have failed in many countries because of failure to integrate such teaching with the environment and other elements. In the case of non-formal education little attempt has been made at integration.

In this regard, a few observations may be made. First, a central question need to be answered as to whether integration of non-formal education in national development efforts is an administrative task requiring structural changes from above or a collective responsibility based on invitation from below. This is closely tied with the notion of development from above or from below. More often than not, the tendency for development is from top-down and therefore integration of non-formal education finds itself as an administrative task requiring structural changes if it is to work. Certainly administrative action or directive is needed to have non-formal education integrated into national development effort. This

would certainly enhance the status of non-formal education which as of now continues to be looked down upon and gets very little resources.

Having decided on this first question, it becomes necessary to consider at what point in the process of designing, implementing and evaluating national development projects and activities integration should be brought in. This raises the issue of training i.e. whether the project calls for training and if so what kind of training - pre-training, on-the-job or in-service training, and how this training is to be done and whether it becomes an integral part of project activities.

Even then, integration poses insurmountable problems because often, the objectives of different agencies and their projects are not consistent and therefore defying integration. To this should be added the fact that integration of non-formal education in national development efforts often meets resistance because of the divergent group interests, communal power structures and the frequent unwillingness of people to share information for development purposes.

These concerns /issues indicate the need to examine integration of non-formal education in national development efforts at different levels: (i) At the global level of national development strategies we need to examine the place and role assigned to non-formal education in relation to national policy. In many African countries, non-formal education is put in a marginal position of dependence on formal education to which not the second but third best should go and its programme content should be biased towards the urban and industrial sector.

Non-formal education which should minister to the needs and concerns of rural societies continues to be at the periphery of rural development strategies and is designed simply to mitigate the misery of rural areas and offer an escape route to urban areas and the industrial sector. It has yet to be acknowledged as part of overall national development policy and given commensurate status as a complement to formal education; (ii) At the level of development objectives themselves there may be lack of integration of non-formal education into national development for the following reasons:

- (a) Non-formal education objectives may be in direct and factual contradictions with national development objectives. If, for instance, national development objectives put great emphasis on the industrial sector rather than the rural sector, it may contradict the objectives of non-formal education which may be emphasizing the development of skills for a productive life in rural rather than industrial sectors; and
- (b) non-formal education may curtail conflict between different segments of the rural populace. Rural people look at education as a stepping stone for a place in the civil service and in the industrial sector. Therefore non-formal education should assist rural communities in fulfilling such aspirations and not thwarting them. Integration can succeed in as far as it promotes escape from the misery and privations of rural life.

(iii) At the local level, community participation as an integrative mechanism in rural development is very much dependent on:

- the political system of a given country
- The role of community leadership
- the cohesiveness of social and economic structures at the community level; and
- the education and other communication facilities available.

Literacy programmes, adult education classes, agricultural extension services, community work, child care and mobile clinics, evening classes and correspondence education for the younger generation, all constitute a learning community whose activities need to be integrated. In this mix of activities, education plays a central role in that political mobilization, for instance, calls for political education so that people can take political decisions; they need to acquire leadership skills and co-operative skills etc.

Unfortunately most agents of rural development operate in total isolation from each other and their clientele often see each other as belonging to a different camp. It is important therefore that a strategy should be developed for bringing all these people under one umbrella for the development of rural communities.

5. Education as an Instrument for Rural Development: Approaches from within and without the Rural Social System

In this last section of the study, an examination is made of the development of Africa, particularly its rural sector because in the introduction to this study, it was pointed out that over seventy percent of the continent is basically rural and therefore an analysis of development of the continent should focus on rural Africa. In this regard, it should be emphasized that such development will not take place without technical change which is required in the tools, implements procedures and equipment for producing goods and services in agriculture.

Technical change involves two processes: the generation of innovations (new tools, new inputs and new procedures) and the diffusion of these innovations to and among users. Both of these are products of education and rural development has often lacked because of lack of diffusion. Debate continues as to which factors both internal and external do influence diffusion in rural areas. This then raises the issue of approach about the diffusion process. First there is that approach which sees technical change and diffusion of innovations more or less as spontaneous processes with "wills of their own" and secondly approaches which see them as processes that are responsible for external factors i.e. as processes that are amenable to being doctored from outside.^{7/}

^{7/} UNECA - Rural Progress Volume VII No. 1, 1988, Addis Ababa, 1988 p. 7.

We will examine these approaches from the point of education as an instrument of rural development within and without the rural social system.

Education, generally defined, is the sum total of all the experiences through which a person or a people come to know what they know. Experience is encounter, direct or mediated between a person and his environment. Encounter educes change (i.e. hearing) in the person; and it produces change (i.e. development) in the environment. Learning yeilds knowledge in the form of cognition (perceived, interpreted and retained information), competence (intellective and/or motive skills) and volition (value, attitude, appreciation or feeling) based preferences for acting or reacting. What comes to be known as a result of learning may be intended or unintended and it may be true or untrue. It is simply what is taken in, perceived, interpreted and retained that we have learnt.

Education as described above occurs in different types of contexts as illustrated in Figure 2.

Figure 2: Types of Education Systems

Teacher Learner Perspective Perspective	INTENDED	UNINTENDED
INTENDED	A. Formal (In-school) Non-Formal (Out-of-school)	C. Non-formal
UNINTENDED	B. Non-formal	D. Informal

In this paradigm, Box D encompasses all instances in which learnings are transacted by chance. For instance, a farmer discovers that every time he sets for the garden early in the morning through a path where grass has not been cleared, the morning dew wets his trousers. To avoid this he decides either to cut the grass or roll up his trousers. In Box B there are all situations in which intended organized learnings are transacted by chance. For instance a farmer awakens an hour early without realizing it, turns on the radio to listen to the news, but instead hears a farm programme dealing with the use of pesticides. The learner is the early riser and the learning is use of pesticides. Box C concerns all occurrences in which unorganized learnings are transacted because of the learners' intent to experience them, as for instance a scholar engaging in research out of which he hopes and learns many things. Finally Box A encompasses all instances in which organized learnings are transacted because of a teachers intent to dispense them and a learners intent to acquire them. For instance a group of individuals enrolled in an adult literacy class.

In all these cases, learning can be evaluated according to who controls the process and the nature and extent of transactions which occur. Where concern is primarily for household and community development, it is possible to evaluate the consequences of economic activities as well as the effects of the various ways of learning skills and retaining knowledge. In this context, it is important to understand and take into consideration different cultural beliefs practices, expectations, attitudes, organization and leadership. All these elements affect and are affected by economic activities and learning habits of the community.

(a) Internal Analysis of Learning Situation

Within the rural social system, every individual, object or event constitutes a learning resource for every member of the community. In essence, the primary resources for learning in rural villages are all the events associated with such activities as supply, production, marketing and the other functions described earlier in this study.

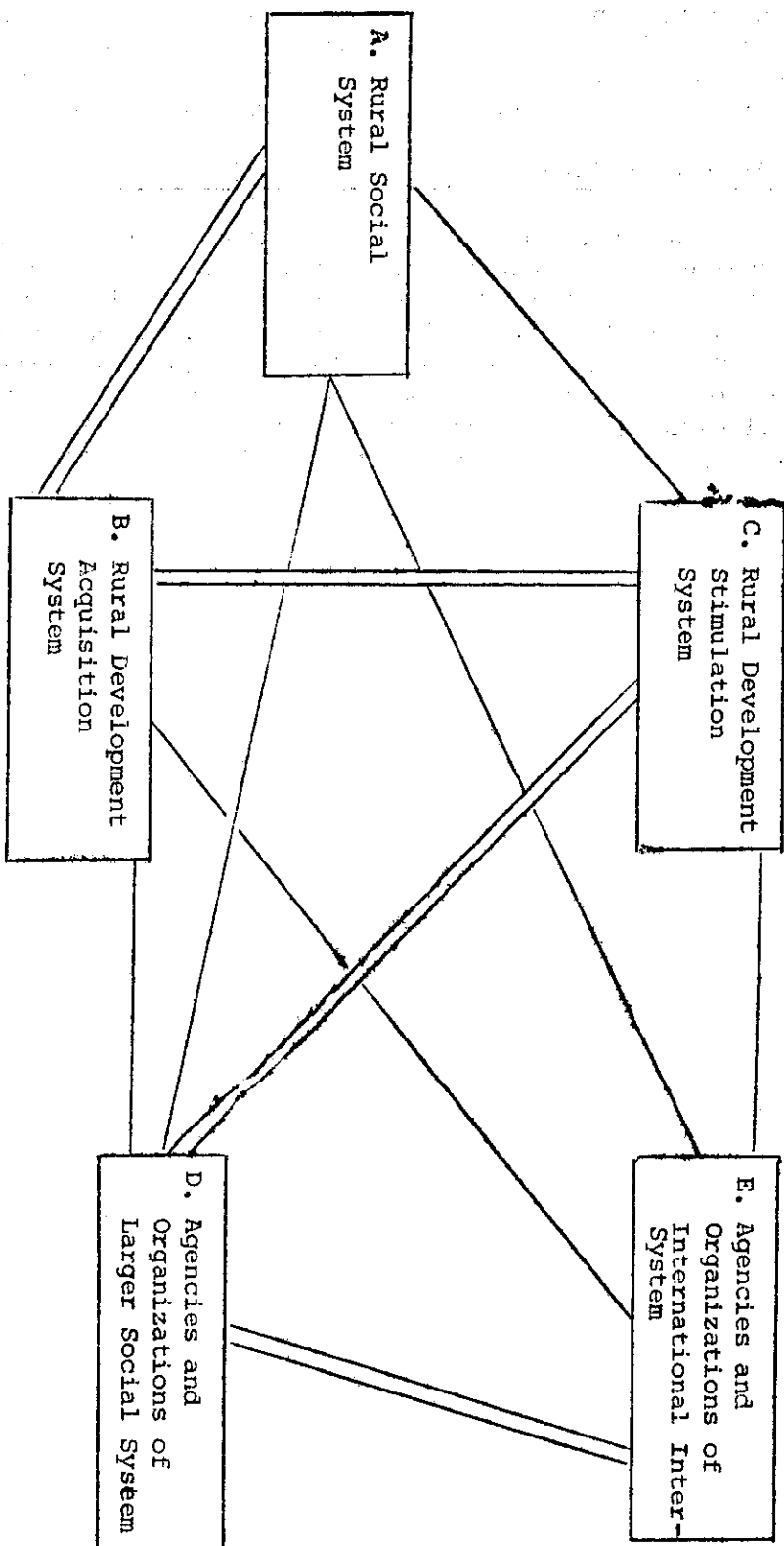
Rural people rely on food production for both sustenance and livelihood, for both energy and meaning of life, whether herding cattle, hunting game, gathering firewood and harvests, fishing or farming. In this regard, learning can be a primary function of a particular activity, or it can be a secondary function of that same activity on the other hand teaching can be a primary function of a particular activity or a secondary function of the same activity. Since most rural areas in Africa are less developed learning is likely to be a secondary function of some other activity which has such aspects as production, personal maintenance, supply and marketing as its primary function. By the same token, teaching will be a secondary function of such activities whose primary functions are production, supply marketing etc. As the community develops and becomes more specialized in its activities and secondary functions of learning and teaching become more of a primary nature as these activities turn to be more involving and requiring better skills. This is where education plays an important role.

Of greater significance is the rewards for learning and teaching. Rural people like anyone else would want to know the rewards of being taught or learning. Whatever thing learn should be seen to bring material or some such benefits. They will be encouraged to learn if they are convinced of the rewards related to their activities. In as far as this is very clear, learning is fostered.

(b) Approaches from outside the Rural Social System

For an impact to be felt in the rural social system, it is necessary to examine the various factors coming from outside the system which often influence rural activities. An understanding of such factors would help us to formulate better strategies for the development of rural areas. In this regard, an analysis is being made of the various approaches to the rural social system from outside with emphasis on educational inputs. To do so, it may be necessary to develop a systems model focusing on schools and various types of non-formal education as falling in the Model in that category of rural development stimulation systems (Figure 3).

Figure 3: Critical Linkages in the Larger Social System Affecting Change in Rural Social System



Note: Three key elements relating directly to rural development are the interface between the Rural Social System and Rural Development Stimulation System (i.e. between A & C), and the interface between the Rural Development Stimulation System (C) and the Rural Development Acquisition System (B) in the model in Figure 3.

(1) The Systems Model

Rural areas could be considered in the context of a larger setting on the basis of factors influencing and affecting their development. It is therefore possible within this context to distinguish five major aspects of the larger system with impact on rural areas viz:

- A. The Rural Social System which is itself part of the larger system and comprising of individuals, families, clusters of families, tribes and clans, all set typically in what is often called villages. In such setting most of the villagers will earn their livelihood through subsistence farming.
- B. Rural Development Acquisition Systems These are organizations of people in the rural social system controlled by the people in the rural social system designed to help them acquire what they need from and interact with, the larger social system outside. These organizations include co-operatives for distribution of rural produce to the larger system and through which goods and services from the larger system may come in. They also include local and area party organizations, youth and farm associations local and district councils, development committees, village councils and associations etc. all of which help villagers to get in touch and keep pace with the larger social system.
- C. The Rural Development Stimulation Systems
These are organizations of the outside world instituted in rural areas and designed to stimulate change and to interact with rural social system and in so doing affect, influence or foster rural development. Within this category are all forms of formal and non-formal institutions - the rural schools, bush schools, evening and night schools, correspondence programmes, literacy campaigns and programmes apprenticeship schemes, vocational and technical schools etc.

This is one of the three key elements interacting and having direct relationship with rural development as it interfaces with the other two: the rural social system and the rural development acquisition system (See Note to Figure 2). Whether this element plays a more effective role in this regard, is not the issue, but what is important is to note the linkage relationship between these elements and to highlight on the major role played by education in rural development.
- D. Agencies and Organizations of the Larger Social Systems
Such agencies and organizations include district, state and national levels existing as health or educational units, government units public corporations and private firms. In one way or another, these agencies or organizations are in the rural areas to assist rural social systems in their many functions.
- E. Agencies and Organizations in the International Inter-System
These are the international agencies/organizations whose activities interact with those of the agencies/organizations of the rural social system. Often rural development projects are financed by international funding institutions.

Even a very small self-help project may be heavily financed/supported by resources from outside (human or financial). Whether the contribution of these agencies have been effective is a matter of debate. But the case of Lesotho is indicative of many African countries:

"On many of the projects financed by external resources, people do not work together, but instead work for the aid agency or government ministry as day labourers, paid either with food, cash or both. Development is intended for rural areas, but in fact the substantive aid goes to the towns, where offices, houses and infrastructure suits for the needs of donors and local bureaucracies are built, where machines are stored and repaired. Plans for these projects were prepared by government officials in foreign capitals and were tailored to the specific needs of the Lesotho government by local bureaucrats.

Efficient and close contact and co-operation between government and people, between urban and rural areas, between village and village, is still more of a dream than a reality. Ordinary people have voiced their ideas their concerns and their hopes for years through surveys conducted by foreign and local agencies. They do not realize it that survey data often lie unused, both on paper and on computer, while the next generation of experts designs its own surveys to answer already answered questions.^{8/}

In spite of these short comings, it is worth noting how those systems inter-relate and function towards a common goal. But before one can do that, there is a major unresolved issue regarding the level and stage at which outside expertise should be inserted in the problem-solving cycle of the rural social system. A major point of emphasis is:

Should outsiders as described in the five elements of the model be used as:

- (i) conceptualizers of projects, programmes and activities without grassroots involvement in rural areas;
- (ii) planners and programmes of rural projects and programmes
- (iii) leaders and managers of rural social systems with or without leadership from rural societies;
- (iv) catalysts or stimulators of change in rural areas;
- (v) technical experts with answers to rural problems;

^{8/} Lesotho can Develop Herself: An Analysis of Rural Development Strategies in Lesotho, Transformation Resource Centre, Maseru, February 1988 pp 5-8.

- (vi) linkers and co-ordinators among various levels and interests within a given project in a rural area;
- (vii) linkers to various sources of knowledge from outside including international agencies and organizations and projects/programmes in other countries which are relevant to the country under review;
- (viii) linkers to expertise in both the developed and developing world whose knowledge and experience might be useful to the developing country in question;
- (ix) should they be considered as technical assistants and gap-fillers in a rural social system where expertise gaps exist?

Unfortunately, and too often, these issues are seen in the last category of the questions asked without any clear conception of how else the gaps might be filled once the outsiders have left the rural areas upon completion of the project. Within this context of outsiders being considered as technical assistants in a rural social system, the third element of the model, the rural development stimulation system, under which education falls plays a major role in nine distinct ways in which knowledge and skills may be used by rural people to solve their problems.

(2) Uses of Technical Knowledge and Skills in the Systems Model

As already mentioned, there are nine ways in which knowledge and skills gained through education can be used by rural societies i.e. education being considered as one of the influential elements from outside the rural social system.

First, education should provide for diagnosis i.e. provide information to help rural people understand their own situation, their needs and wants. In this regard, the most relevant knowledge aspect of knowledge required from outsiders to rural populace is not so much the facts but rather the methods to assist in self-enquiry and observation and thus reducing dependence on outside expertise.

Second, education should provide for awareness in the rural populace to enlarge their thinking about what possibilities exist for them to improve their rural life. This could be done through a net work of activities, the radio, television, newspapers, oral communication or books, even though rural people make little use of books and technical materials.

Third, education should assist rural people to practice in goal setting and to examine their needs in a way that enables them to do so. Assuming the goals of rural people are set by someone else, (by higher authorities and bureaucrats) how much are people aware that they still can control their own situations. If rural people have to develop a conception of themselves and solve their own problems, they need to be provided with facts, information and a framework which they can use for setting their own goals.

Fourth, education, through its institutions whether in rural or urban areas, should provide management procedures to rural people as regards various steps in change processes such as planning, start-up, maintenance, diffusion or evaluation procedures. Most rural people need to know something about these management procedures.

Fifth, rural population usually require products and print materials such as guides, manuals, specifications part lists etc. as well as training (both on-the-job and in-service training) and oral guidance what educational institutions can do is to provide for knowledge storage centres as well as reference centres for use by rural people. In this regard the construction and preparation of such materials and centres is of paramount importance.

Sixth, pertains to installation by way of what personal assistance and moral support can be provided through another person. In this regard, experiences of people who have undergone similar experience can play an important role.

Seventh, there is need for evaluation of data to see whether a proposed programme/activity is worth trying. Often rural people can be confronted with a number of proposals which may require an evaluation - before-trial to see its relevance to the rural situation. Even after trial, expert advice may be sought from within the rural social system or from the larger system.

Eighth, often information and data need to be spread and reach other people. This is diffusion by which knowledge is spread within the rural social system.

Ninth, once information has been acquired, moulded, reassembled and transformed, it needs to be adapted to local needs. This is adaptation and probably the most difficult of these aspects described so far because adaptation provides a closer fit to the users special needs and requirements provided proper use is made of the knowledge learned or gained.

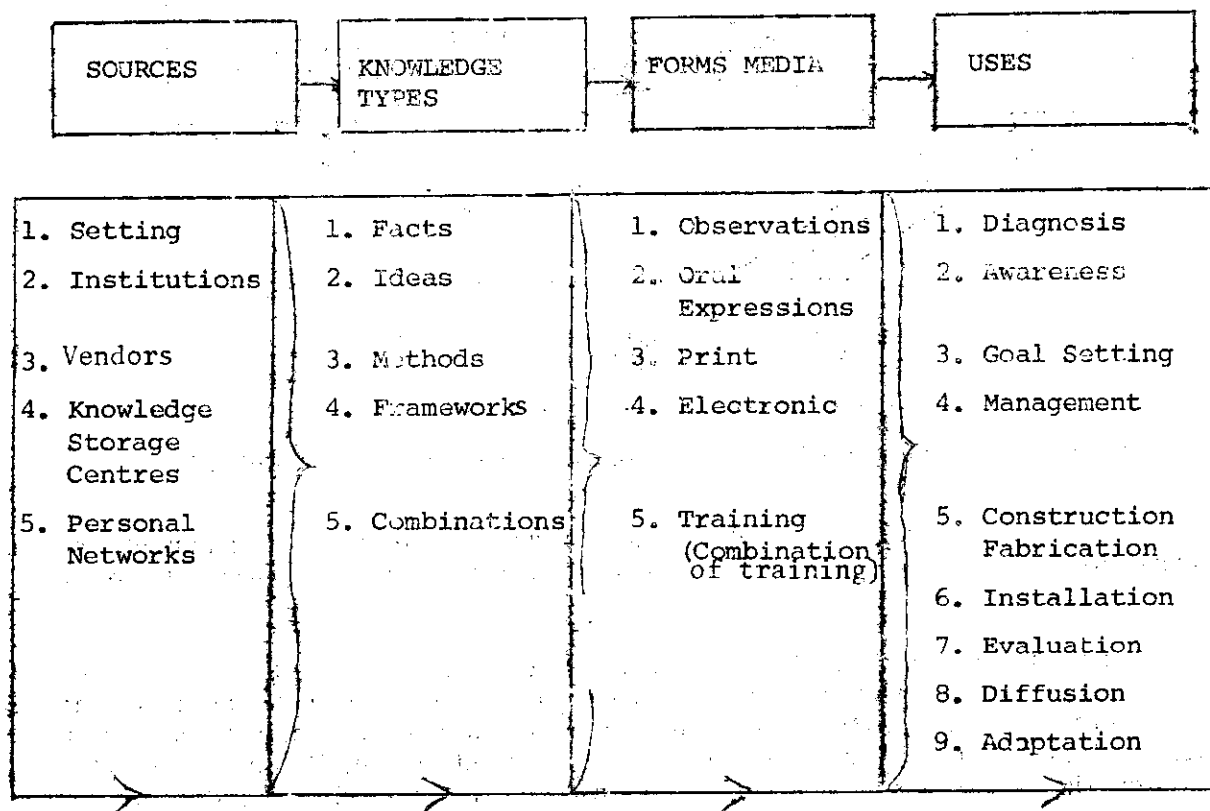
Within the notion of the systems model described above, the use of skills and knowledge generated by education, we may develop an extended taxonomy of knowledge transfer elements to rural societies on the basis of types of knowledge to be transferred i.e. facts, ideas methods, frameworks and combinations to be made. Then secondly it can be done on the basis of the sources of knowledge whether it comes within or without the rural social system. These sources will include such areas as one's own setting, or proximate environment; or the remote/distant environment; from institutions such as government institutions schools universities, voluntary or international institutions; vendors which include manufacturers, distributors and suppliers of educational information, technology, equipment, educational materials etc. Others will include knowledge storage centres and rural networks.

The forms and media of such knowledge and skills transmission would include observation of what others are doing or have done; oral expression by way of consultation of local people regarding their projects, programmes and activities; through print (which would include all forms of books, newspapers, manuals,

journals, magazines and any handouts for use by rural dwellers in their day to day activities; and then the products which can help the transfer of knowledge for rural use e.g. radio, television, projectors, cameras, equipment and tools such pumps for generating power etc.

Lastly, the taxonomy includes the uses to be made of knowledge through the nine ways described earlier in this section of analysis e.g. diagnosis, awareness etc. This taxonomy of transfer of knowledge to rural areas may be summarized diagrammatically in Figure 4.

Figure 4: Summary of the Taxonomy of Knowledge and Skills Transfer Elements in a Social System

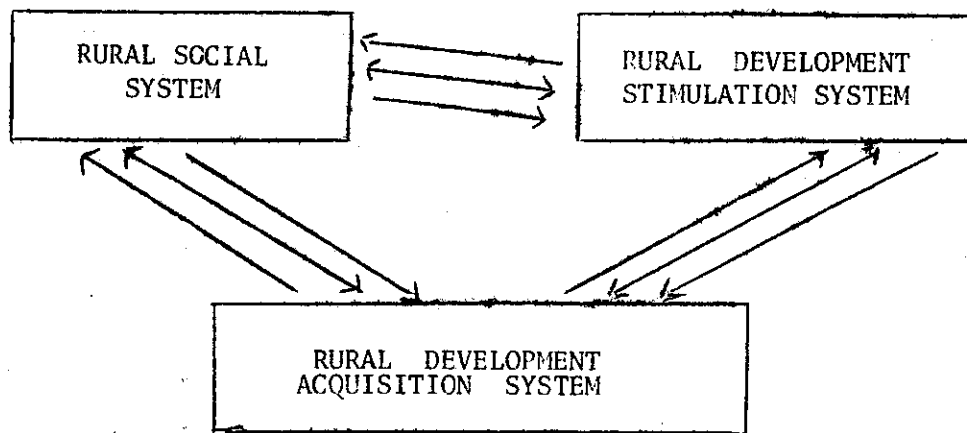


In an earlier analysis, on the systems model it was pointed out that the three key elements of the system focus on the linkage relationship between the rural development stimulation and acquisition systems and the rural social system. We will now examine this linkage and the attendant impact on the elements.

(3) Linkage Between Rural Social System Rural Development Acquisitions System and Rural Development Stimulation System

Linkages may be categorized according to the source and direction of control of channels and transactions, or according to cost involved, frequency, the quality of education or whether such linkage is formalized or informal. This is illustrated in Figure 5.

Figure 5: Control Linkages of Key Systems Elements



Note: The arrows indicate the possible direction of control.

Each of the three key elements controls some of the channels and transactions, and others are a combination of controls of these three elements.

Earlier it was said that linkages may be categorized according to frequency of reception or frequency of sending information or transactions; or according to capability of transmitting goods and information within minimum change in nature of that which is transmitted. In terms of education, it may be possible to categorize linkages according to the extent and quality of education (knowledge, skills, attitudes, and values) required to benefit rural areas in whatever they are doing.

As a consequence, one finds that as a rural social system moves from underdevelopment to some form of balanced development, the frequency of transactions between rural and the larger system of society increases; and so

does the perceived value from transactions with the outside systems; the quantity of time invested in transactions with other systems as well as the efficiency of transactions with the outside systems. No wonder as more people get education from rural areas, their contact with the outside world increases and the benefits accruing to rural areas both in terms of remittances sent to the extended family in rural areas increase and thus reinforce one central value of education in Africa as an escape route to a career in the modern sector and a post in the civil service away from the privation and misery of rural life.

6. Non-formal Education and Development: The Future

Too much has been written about education and development; about improving the functionality of education to national needs, about education serving the needs of society; and about education for self-reliance. Yet we need not stop here because so much has already been said. We may be committing what is well expounded in the West African proverb that "A fly which does not listen to advice will follow the corpse on which it is feeding to the grave", or as has often been said, "Those who do not learn from history are condemned to repeat history". Since we would not like to follow the fly to the grave or repeat history, it is necessary to restate and emphasize some of the strategies which need to be pursued and of which education appears to be highly instrumental.^{9/} They are stated here as principles for effective and successful rural development.

A first principle relates to the use made of local resources before seeking outside assistance both in terms of the larger national system and the international system. These local resources include people, skills, knowledge, materials, money, labour, ideas, felt needs and goals and training facilities. All these are directly related to education and how they affect and influence rural development.

With reference to people, rural development calls for the participation of people at the various levels starting from the lowest level of people simply being aware of what projects, programmes exist for them. Awareness is a kind of gateway to higher levels of participation and without awareness there can be no participation. Then the next thing is for people to be informed at which point a person should do or say something about the goals of a project, its location, financing etc. Then there is that level of participation which may be called representational consent in which people take part in choosing those who will

^{9/} From a Report Based on the Findings of the 1986 Marakaber Conference on Successful Small Rural Development Projects, Transformation Resource Centre, Maseru, Lesotho, February 1988.

be directly involved in a project, or that participation involving people in terms voting as a result of being given direct consent by others. Next level is that of vicarious participation meaning that the persons in question feels that he is a party to key decisions taken as a result of being identified with the project decisions taken. Finally, there is that level of participation called full participation wherein people care taken as full members of a programme project etc.

In the case of Lesotho, it is often regretted that people do not feature at any of these levels and hence the failure of many projects designed to assist rural people who feel they are not a party to whatever is going on. This is not the result of bad or no education on the part of the people, but the result of Africa looking for assistance from outside before exhausting local resources.

Rural people know what their needs are, and how they could satisfy them if they were consulted. Yet they feel neglected while knowing very well that projects designed in foreign capitals or in their towns and cities with foreign expertise will definitely fail.

To fulfil and satisfy this first principle, it is important to use local resources - people, money, skills, knowledge materials, equipment etc. First, through education, it is necessary to provide local community, educational and political leadership as a basis for mobilizing local resources. Then exhaust the use of local resources - skills, experts, facilities. One sad story is that many African countries would prepare to train their nationals abroad rather than locally. It is within this context that both in design, context and execution, most non-formal education programmes tend to be carbon copies of those in developed countries. Unless there is great shift from this practice, little progress can be expected on the African continent, Africa will continue to be dependent on everything on developed countries.

A second general principle pertains to training of people locally rather than sending them overseas. Non-formal education suffers from lack of properly trained and qualified personnel to design, plan and execute NFE programmes. Those who are engaged in non-formal education programmes are either ill-equipped or untrained for their tasks. Many of those who are trained and qualified for their tasks were either trained overseas or are foreigners assisting with such programmes.

In the spirit of self-reliance particularly in respect of rural areas, training of personnel within the local environment is of paramount importance. Vocational and productive activities in rural areas should be designed and developed with a rural environment in mind. More important is the view that as far as possible personnel for rural programmes should be trained locally, if not within the country. Non-formal education approaches should be used where necessary, particularly in programmes emphasizing self-employment.

A third principle relates to co-ordination of local groups, local people, their projects and activities, and co-ordination of activities of all those agencies organizations and associations. There are too many agencies and organizations involved in non-formal education programmes such as vocational and technical training, productive activities in education. Besides most rural projects exist in their own right without any reference to overall national programmes and how they relate to national plan of action.

Co-ordination should allow for integrated project development and execution at both the local district and national level; between various agencies and institutions, and between personnel on different projects and assignments. In this regard, it is important to encourage, foster and nurture collaboration and co-operation amongst organizations, agencies, associations, adult groups, women's groups, and many other development oriented organizations to participate actively in all activities.

A final principle calls for a two-way communication between rural communities and the outside world. Since development should not necessarily be from top to bottom but from bottom to top as well, it is essential to have a two-way communication. People's felt needs should be communicated to the decision makers, and this can be effectively done if there is a two way channel of communication. Often rural communities live in total isolation from the larger social system. Although they are producers of food and primary products, they are there to be seen as such rather than to be heard. Education can do a lot in making people aware of the fact that their felt needs are the concerns of higher authority and that they have a role to play in national affairs. Education can do a lot to ensure that this happens.

7. Conclusion

What, then, can be concluded as regards non-formal education and development on the basis of the analysis made above? Perhaps not as much as some writings continue to claim or have so far allowed. Much of what has been said in the previous pages can hold good if there is sufficient data and information on the role and effectiveness of education on rural development.

Experience has shown that large-scale outside interventions designed to achieve increased productivity, alleviate misery and poverty, and reduce rural-urban migration have been less than successful. Indeed the promises of education as elixir for socio-economic ills and the alternatives of non-formal education to hasten the solution to rural problems have all been cast into doubt and perhaps by luck, a better to-morrow. Part of this failure lies in the fact that the objectives of rural development, agricultural productivity and of formal and non-formal education, have been set in isolation to each other and without taking into account the felt needs of rural communities their concerns and pre-occupations.

Perhaps also more important is the issue of power: How much of social, political and economic power to rural societies have? Politically, in a number of countries rural party organizations have a lot of power over their lot, but that power is more of a response to commands from above; often used as control mechanisms over the activities of rural people. Rural party organizations cannot do any thing other than what the authorities at the top want. In terms of economic power, it is the bureaucrats and city/town people who often decide on the prices of produce and products from rural areas. Rural communities are powerless in negotiating for themselves prices worthy of their labours.

There is no doubt that outsiders (both at national and international levels) have poured in a lot of resources into rural areas, significant changes to which have been short-term at best. Packages of indigenous, appropriate and modern technologies, even when supported by education, credit, and marketing arrangements have been mostly disappointing. The reason for this has been that the impetus for change has been stimulated from outside and not from inside the rural communities who should have been controlling their own destiny. Unless there is a well decentralized programme determination, little change can be expected in rural areas. Indeed as of now, rural communities have not been able to improve their welfare and have neither achieved economic nor political power.

With the ever present socio-economic crises in Africa, non-formal education continues to be seen as one of the many instruments for solving rural problems. To stimulate rural social systems in the directions desired by rural societies, non-formal education should serve as a necessary activity in mobilizing mass participation in national development, in bringing about power to the people; in assisting people to make better decisions, in programme planning, development implementation, and evaluation; in developing a two-pronged development approach - top-to-bottom, and bottom-to-top; the identification of needs and how these should be made part of national development needs; and fostering a two-way channel of communication.

This, however, does not mean that non-formal education by itself provides the key to rural development. But it can do a lot of things. First, it can bring power of knowledge to the people. Knowledge gives an awareness to people as regards what there is, and how to go about it. Knowledge gives confidence in people to participate in various activities. Second, non-formal education can facilitate communication among rural families and between rural villages; and between the rural social system and the larger systems - both national and international. Third, it can bring about the shared awareness which is often associated with a convergence of interests among rural dwellers and urban bureaucrats. And finally non-formal education can lead to organization of rural communities, to political power and to decentralized programme determination.

Certainly beyond all this, non-formal education may bring the knowledge of rural social systems to rural development stimulation systems and to the agencies and organizations of the larger social system within the context of the systems model described in this study. It is possible, therefore, that these

elements of the system may discover the appropriate economic stimulants and appropriate non-formal education programmes and activities.

Experience has shown that the conceptualizations of non-formal education in relation to development and particularly rural development have been inadequate. It can only be hoped that through research and a better understanding of the problems and concepts, more refined and better designed non-formal education programmes may be developed to minister to development needs of the people.

Clarification and Definition of Concepts

1. Education: To "educate" means etymotologically to educe or draw out of a person something potential and talent; it means to develop a person morally, spiritually and mentally so that he is sensitive to individual and social choices and able to act on them; it means to orient him towards a calling by systematic instruction; it means to build a discipline or form abilities. The act or process of achieving one or more of these objectives is as a first approximation, what education is about.
2. Formal Education is the hierarchically structured, full-time chronologically graded system running from primary school through university, including a variety of full-time technical and professional training, and generally controlled by a central ministry of education.
3. Non-formal Education is any organized educational activity outside the established formal system, whether operating separately or as an important feature of some broader activity that is intended to serve identifiable learning clientelles and their objectives.
4. Informal Education refers to the life-long process of acquiring incidental attitudes, values, skills and knowledge from daily experience and the influence of resources of one's environment. Through informal education, a child masters the fundamentals of his mother tongue and acquires a substantial vocabulary before he/she goes to school. Indeed most of the occupational skills and social role functions in traditional societies are learned through informal education.
5. An Adult: The definition of an adult depends on the use and meaning for each society and can only be used internationally or comparatively in this way. It is impracticable to impose one precise meaning, for instance in terms of age, on all different societies. However, an adult may be described as "a responsible home-maker, worker and member of society." In many African countries, such an adult is living in and is expected to participate in national, development activities in a developing society.
6. Adult Education: The definition being put forward is not very scientific but is a pragmatic one. In simple terms, "adult education" is the education of adults in any form and by any means outside the regular, accredited education provided by the formal school, college and university system. Alternatively it can be defined as "all transfer of knowledge and process of grasping knowledge and experience by adults."

Given these definitions, three modes of adult education may be distinguished viz:

- (a) education for adults outside the formal system not leading to qualification;

- (b) education by adults outside the formal system not learning to qualification, deliberately provided alternatives for adults, usually as a form of second chance education intended to have the same results as formal education; and
- (c) the deliberate provision for adults within the formal system.

Normally, adult education unless specifically qualified includes just the first two of these modes of education. In many African countries where illiteracy is very high adult education is very often equated with literacy work. But it is very important not to treat the two as the same although as a result of policy decisions, most effort for adult education may go for the eradication of illiteracy. The equating of literacy and adult education should not be encouraged as this tends to hide some of the most important aspects of adult education. More important is the fact that literacy can either be "pure" for learning to read and write, or functional literacy related to productive skills or in the context of integration rural development strategy. A distinction should therefore be made between literacy and adult education in its various forms.

7. An Adult Educator: In (6) above, adult education was defined as "all transfer of knowledge and experience to adult and the process of grasping knowledge and experience by adults. the adult educator then is "every person who is active in this process". He is that person who is part of the focus working in a community as an educating force and a source of education for the community.

Non-formal education programmes of which adult education is a major variant are supposed to serve the following needs:

- (i) As an alternative for those who lack the opportunity to acquire formal schooling;
- (ii) as an extension of formal schooling for those who need additional training to get them into productive employment or to become self-employed; and
- (iii) as a means of upgrading the skills of those already employed.

8. Teaching: To teach is to try to help someone learn something. More formally, it is to help someone acquire or change some behaviour; that is, some skill, attitude, ideal knowledge, or appreciation.

Teaching is much more than presenting information or even presenting ideas. It includes, among other things, guiding someone to learn by means of the probing, discovering, analysing, and examining activities which are called reflective thinking, the subtle business of building attitudes and values and the more straight forward tasks of skills development.

9. Purpose of Education: The purpose of education is to prepare people, especially the young, to live and serve the society in which they live, and to transmit the knowledge, skills, values and attitudes of the society. Whenever education fails in any of these fields, then society falters in its progress or society degenerates into a state of social unrest as people find that their education has not prepared them for a future which is not open to them.
10. The Rural Social System: A system may be defined as a deliberately designed and structured organism, comprised of inter-related and interacting components which should function in an integral whole to attain a pre-determined and specific purpose. Such a system is built from parts or components, the sum of these being the component of the system for the accomplishment of a specific purpose. The operation and functions in which the component is engaged in order to accomplish the purpose of the system sum up the process of the system.

In the context of this paper a rural social system includes individuals, families, and clusters of families, often typically called rural villages, and the dynamic conceptualization of which takes a flow prospective of inputs and outputs.

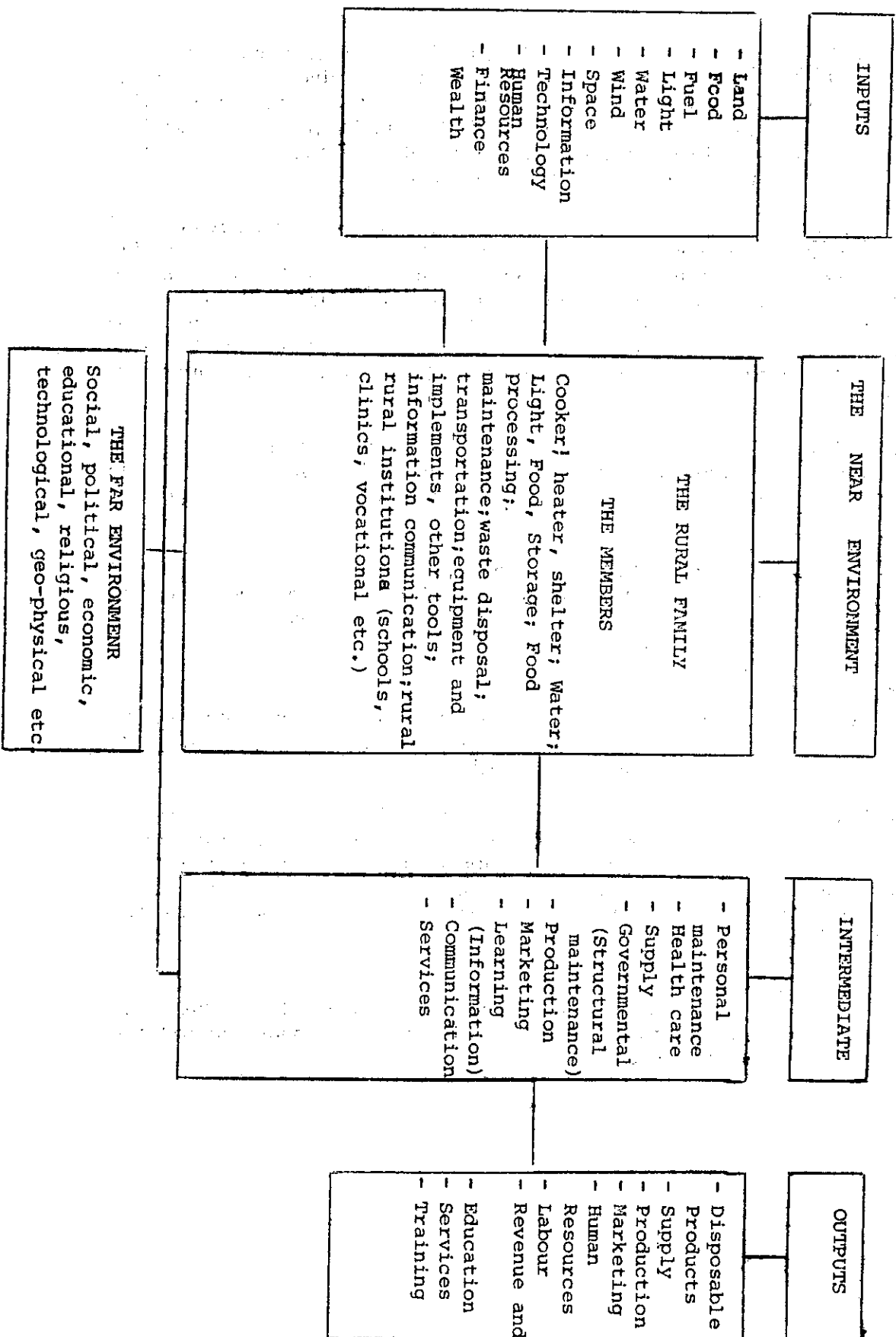
Inputs flow into the rural family and outputs flow out. The family itself consists of individual members, and either performs the functions discussed in Section 2 of the paper to which this is an annex, or shares them with other families within the rural social system.

The family is viewed an intimate group of individuals who share the same near environment which contains information, shelter water, food storage, a waste disposal system, domestic animal maintenance, and implements such as heater, cooker, light and transportation.

Inputs into the rural family include food, fuel, light, water, land, space, information, knowledge, skills and technology. These can be acquired through exchange with other families, inside or outside of the particular rural social system (the rural village) or may be available to the rural family in the ecosystem without need for exchange. These inputs lead to outputs by way of intermediate products.

The far environment, in which the near future is set, and the existence of which is known to the families, includes the larger ecosystem. This larger milieu features social, political, economic, religious, and geophysical systems. (As illustrated in Figure 6 below.

Figure 6: The Flow of Perspective of the Rural Family in its Ecosystem



- II. The Concept of Productivity: The word "productive" may be defined simply as something having the power to produce i.e. being fertile, yielding favourable or effective results. In economics, the word "productive" means "producing or capable of producing goods and services which have monetary or exchange value. One way therefore talk of productive assets i.e. relating to such production of goods and services. In essence then, one can talk about the economic assets of education because education is an economically and socially productive investment i.e. the knowledge and skills obtained from education have monetary or exchange value. In this regard, it is possible to talk about education which is productive as an economic term but not so much as an education concept.

The confusion arises from the fact that in man's search for making education more relevant to individual and national needs, productive activities in the economic sense were inserted into the education programmes so as to make those programmes more self-supporting and for self-fulfilment and self-development. This has to be done through the development of useful skills knowledge and attitudes in the various areas viz: social, cultural, linguistic, aesthetic, political economic and spiritual. In this regard, productive activities were inserted into education as an approach to making education relevant to national needs. As an approach therefore, the term productive education cannot become a branch of education and thus a field of study: it is only a strategy for educational development.

The concepts of education and productive activities should thus be seen as being very distinct. The latter has come into sharp focus because of the need for education to produce loyal and useful citizens; the need to have productive citizens in the economic sense either as employees or as creators of employment with the right knowledge, skills and attitudes; and the need to produce lawful citizens who can make some contribution to national development. Thus, many countries have integrated into the curriculum productive activities to ensure the production of desired results in the learners. This inclusion has led to the linkage between education and productive work.

What is it that really makes one kind of work productive and another merely something to be gotten through such as baby sitting or cleaning the house stove or a cooker. Productivity lies in three things:

- (i) the intrinsic value of the thing produced;
- (ii) its enduring quality, the length of time the product will continue to have meaning and
- (iii) the originality, newness, pioneering value of the product as something which is not found growing on every tree, but contributes a new idea for the continuity of a society, community or a nation. In this regard, we can contrast between productive work and work in general often done as a routine activity.

12. Basic Education in Response to Basic Needs: The concept of basic education introduced in this paper seeks to overcome the limitations of organized education by expanding the traditional concepts of an educational system and its functions. Basic education should meet the basic need of an individual to receive a foundation of knowledge, attitudes, values, and skills on which to build in later life for the benefit of himself and his society, whether or not he receives further formal instruction. This conception does not minimize the concomitant need of a society for additional higher skills to allow individual basic needs to be satisfied — through educators (teachers and extension workers, for example) and specialists (such as engineers, agronomists, and doctors) whose direct contributions are essential to its economic and social development.

Basic education comprises planned activities in formal, nonformal and informal education. It is a relative concept, not an absolute, whose appropriate elements vary according to the country and the individual. In essence, consists in the following:

- Communication skills and general knowledge, which at the basic level include literacy (if possible), numeracy, and general civic, scientific, and cultural knowledge, values, and attitudes;
- Life skills and knowledge, which embrace hygienic practices, sanitation, nutrition, family planning, the environment, management of the family economy, and creating and maintaining the home; and
- Production skills, which embrace all forms of activity directed toward making a living or the production of goods and services, at whatever level of sophistication.

This concept of basic education does not imply a specific required number of years of formal schooling. Rather, it recognizes that the character, amount, and means of delivering education must necessarily differ according to the target group — whether children in school, children not in school, youth and adults — and their distinctive needs, and that the different elements of basic education are acquired over a lifetime.

Six criteria govern the nature and characteristics of basic education. First, it has a clear base in economic, social, health, shelter, or nutritional human needs. Second, it is concerned with equity: there must be a high potential for equal distribution of whatever rewards are associated with educational outcomes (such as economic gain, improved health, and better nutrition). Third, it is linked directly to real employment opportunities, especially those involving a country's labour-intensive agriculture and industry. Fourth, it has a low cost per capita and per instructional unit. Fifth, it recognizes the aspirations of the learners, with responsive programs planned toward fulfillment of these aspirations. And sixth, it is of limited duration, with frequent completion points at which students may terminate.

In sum, basic education responds effectively, as a means to achieve the goals of a human-needs approach to development. It has a close relationship between learning and action, between meaningful work and use. The learning

takes place within the activities and values of everyday existence. It focuses on the learner and his or her environment — in the factory, in the shop, in the home, or on the farm. The rewards of learning are real rather than symbolic and reasonably immediate rather than deferred.

13. Non-formal Education and Basic Human Needs: Generally, non-formal education has suffered from the main stream of education expansion, national planning and development thinking. In a way this suffering has been caused by non-formal and adult educators who have contributed to the isolation by stressing artifactual importations of western systems of education (e.g. secondary and tertiary levels extra-mural offerings) and from incomplete fragments misunderstood as self-contained wholes (e.g. formal literacy programmes without follow-up courses or links to social and production setting).

Only recently has there been an overt recognition that non-formal education is a developmental process and therefore a political one which must interact with other elements in social, political and economic change. This recognition brings into focus the relationship between education and development and man as the centre of it all. As a great African adult educator once put it:

"Development has a purpose; that purpose is liberation of man. We talk a good deal about development - about expanding the number of goods and services and the capacity to produce them. But the goods are needed to serve men; services are required to make the lives of men more easeful as well as more fruitful. Political, social and economic organization is needed to enlarge the freedom and dignity of men. Always we come back to MAN - the "Liberated Man", as the purpose of activity, the purpose of development"

In placing man at the centre, emphasis is being made on the basic human needs definition of development i.e. that development is concerned with satisfying basic human needs of individuals in society. According to Herbel Green, improvement of life for a man, requires the satisfaction of five main types of need:

1. Personal consumer goods - food clothing, housing
2. General access to such physical and social services as good water-supply, communications, preventive and curative medicine, and education.

Physical, human and technological infra-structure and capacity necessary to produce those goods and services.

^{1/} Julius Nyerere's address to the Conference of Adult Education and Development in Dar-es-Salaam 1971

3. Productive employment of individuals, families and communal units yielding high enough output and fairly distributed rewards so that they earn incomes sufficient to enable them to benefit from the supply of goods and services.
4. Mass participation in decision-taking, including revision of plans, general strategy formulation, control of leadership, and also in the carrying out of decisions.^{2/}

From the point of view of non-formal education, the last three items are the challenging ones because they touch upon the central theme of adult education, i.e. help adults learn how to produce and use the goods and services and hence satisfy their needs. A second aspect is to train them for productive employment, and how to educate them to take part in decision making. In other words, how do we educate people to ensure that they control their own economic and social destiny and that they share the wealth which they produce.

It is being argued here that non-formal education can rise to these basic needs challenges and in so doing contribute to the social, economic and political development and hence enhance national development. However, non-formal education has often been separated from the formal education planning and has not been taken into sufficient account by the social and economic planners.

In addition, non-formal education itself has had so many variations and let alone it has been the responsibility of so many government ministries, voluntary agencies and other bodies. Yet given the fact that non-formal education is part of a widespread search for alternatives in education, it might acquire greater significance from a consideration of the current analysis of what "development" means. It must be emphasized that there are fundamental changes in the definition of the concept of "development" itself which incorporates such notions and ideas as human beings, employment, environments, social equity, participation, privileges, basic needs satisfaction, growth, process. It is therefore important to give a definition of development suitable for our purpose.

14. Development: The word development, though difficult to define, has taken on various meanings and connotations depending on whether it is viewed as a state of affairs or as a process. Given the correlation between change

^{2/} R.H. Green - Adult Education, basic human needs and integrated development planning, convergence vol. 9 No. 4 (1976) pp. 45-60.

and time under the laws of nature, it is more useful to define development in the dynamic sense. Consensus in emerging that development can no longer be perceived as harmonious but has to be understood as a sequence of conflicts in different forms and at different levels."

Development therefore could be defined as an unfolding process or act of advancing components of an object or of a nation through successive stages within a conflicting environment. In the case of a nation, the process, which is usually referred to as national development, must take place simultaneously within the political, economic and social fabrics of the society. In other words, the process must incrementally bring to an advance stage the political, economic and social structures, within the context of the people's needs and values.

The effective meaning of the process can only be derived if it is self-sustaining and allows the people of that nation to free themselves from the envelope of poverty, ignorance and disease. This requires (i) designing and pursuing measures that would efficiently generate and distribute to the people needed goods and services; (ii) maximizing the utilization of the nation's human and other resources; and (iii) insituting legislation and institutional framework for ensuring active and full participation of the people in the process.

15. Rural Development: By analogy, rural development could be defined as a development process aimed specifically at advancing the welfare of a "target group" located within geographic clusters that are characterized rural as defined either in terms of the volume and nature of economic activities; or the nature of socio-political infrastructure and institution or population density. Apart from the purposes of conducting population censuses, the rural clusters are usually defined as areas with non-existing or neglicable social services, political awareness and involvement and economic interaction.

Therefore, by definition, "rural development" is more than the process of "advancing through successive stages", but one which should be viewed as a process of human development in which man is both the subject and the object and which the "rural population" features in the machineries for (i) decision making, (ii) economic growth, and (iii) national income distribution. Accordingly, the process should deal effectively with the national "macro-perspectives" and the constituent "micro-grass-roots" contradictions. In the African context, these contradictions are fundamental and could, at times, call for the creation of new social, political and economic order.

It is therefore to be argued that non-formal education assumes clarity and usefulness to the extent that it is informed by an understanding of the fact that it is instrumental to development as defined here. Non-formal education is being considered in relation to development because it is more reponsivle, tailor-made and relevant to the needs of communities in rural areas. It focuses

on teaching people to improve their basic level of subsistence and their general conditions of learning. Learners acquire knowledge and skills for their immediate use thereby avoiding the long gestation period which often exists between formal education and productive employment.

16. Adult Learning:

(a) Fundamental Issues about Adult Learners

Most trainers today still apply the methods used by teachers in Primary schools to train adults in Industry. The fact is that the assumptions which underly elements education for children do not fit those about adult learners. For this reason, most training efforts are often ineffective.

Learning for a child is externally motivated. The child is pushed into a learning situation by the parents in which they live. Therefore to the child learning is primarily a prescriptive educational process which is solution centred and constantly directed to most prescribed values.

For the Adult in Industry the situation is very different. The adult in an employment situation has the intrinsic motive for self-career development we hope. Though he may at times be externally motivated by his Boss and perhaps, the opportunity for promotion and advancement, he has the choice to opt of the learning situation. This is unlike the child learner. Therefore to the adult, learning is a process or re-training which is designed to solve specific performance needs and consequently, such learning process should be by consultation and reflection on self and occupational or professional needs.

(b) Major Concerns

From the above analysis there are two major concerns which the trainer should not:

- (i) Knowing his adult learners - their feelings and attitudes towards themselves and
- (ii) Helping his adult learners to learn by creating the appropriate learning environment, strategies, methods and techniques as a result of proper understanding of some learning generalizations and assumptions.

(c) Feelings of the Adult Learner: These relates to the attitudes he has towards himself - his own psychological feelings and problems, the understanding of which will help the trainer of adults to be effective learning facilitator.

- (i) Feeling of Anxieuty and Fear - which is caused principally by the psychological principle of "Self Theory"

This relates to potential conflict of values involved in going back to learn.

The theory is that every adult already has certain well-developed ideas about himself along with his own system of ideas and beliefs. To admit that he has a need to learn something new, is to admit that there is something wrong with his existing values. The Hint here is that teachers of adults should carefully plan teaching-learning situations to help adults preserve at least some of their "self image"

- (ii) Feeling of Ageing - which adults feel affects their intellectual capabilities.
- (iii) Feeling Arising from their Different Social Background e.g. the lack of rich family to get adequate childhood education etc.
- (iv) Feelings Arising from School Memories
 - of poor performance
 - of poor teachers, poor facilities etc.

The awareness of these four important set of feelings will help the trainer in his responsibilities towards the adult learner.

(d) Some Generalizations Involved in Teaching/Learning Process^{3/}

Trainers should be aware of the following teaching generalizations:

- (i) All human beings learn irrespective of age
The old adage that you can't ~~teach~~ an old dog new tricks is wrong. The problem is that it is just more difficult because the elderly have learned some wrong attitudes and skills.
- (ii) Learning is an Active Process
People learn best when they are actively involved and interact with one another and with the teacher.
- (iii) Learning is Individualistic
Each person learns in relation to his own personality, perception, expectation and readiness.
- (iv) Learning Takes Place at Various Levels
Of knowledge skills and attitude. Ther first two are much easier.

^{3/} See Gordon L. Lippit, "Concepts of Learning and the Development Process", Training and Development Journal May, 1969.

than attitudinal change.

These generalizations are realistic and their awareness will help us to design learning experiences for adults and evaluate the effect of our efforts.

(e) Some Assumptions about Adult Learners and their Implications for Training Methodology^{4/}

To further deepen the trainer's understanding of the adult learner, he should carefully consider the following learning assumptions that seem important for the adult. Below each assumption is the general implication for the selection of a training strategy, method and techniques.

- (i) That adults enter learning situation with an image of themselves as self-directing, responsible, grown-ups, not as immature dependent learners. Therefore they will resist situations in which they are not treated with respect.

Implication Let adult help to plan and conduct their own learning experience they will learn more, than if they are passives recipients.

- (ii) Adults enter learning situation with more experience than youths. Therefore they have more to give to the learning situation in terms of experience.

Implication Use those methods which build on and make use of the experience of the learners. These will produce the greatest learning.

- (iii) Adults enter a learning situation with more intention to apply learning to life problems than those who are younger. Therefore they require practical results from learning.

Implications Use strategies that will focus learning experiences on life problems as perceived by the adults since learning will be more relevant than when organized around prescribed subject topics.

(f) Conditions Required for Effective Learning

With the above generalizations and assumptions, we can now focus on specific conditions required for effective learning in adults.

^{4/} Malcolm Knowles, Training and Development Journal, June 1969.

- (i) Sufficient Motivation: (a) Self; (b) From Job/Social Environment;
- (c) The Facilities for Learning
 - (ii) Clearly defined and mutually acceptable need for learning
 - (iii) Appropriate materials for learning
 - (iv) Opportunity to practice acquired learning
 - (v) Friendliness from trainer particularly by taking time for individual counselling and avoiding criticisms
 - (vi) Secure satisfaction from learning by providing some sense of achievement, confidence and satisfaction in the adult learner
 - (vii) Learning should be varied to prevent boring through repetition
 - (viii) With learner identify or set standards of performance
 - (ix) Let the learner have a means of assessing his own self behaviour
 - (x) Learning through interactive processes is usually more valuable
 - (xi) Let learning relate to change in self or in job situation since learning is basically a process of change.