# BASIC EDUCATION in the SAHEL COUNTRIES

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# BASIC EDUCATION in the SAHEL COUNTRIES

### uie monographs

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by R. H. Dave

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# 2. Lifelong Education and the School.

# **Abstracts and Bibliography**

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### **FOREWORD**

In recent years the World Bank has been increasing its assistance to the provision of basic education opportunities for both children and adults. In the case of the Sahelian countries of West Africa, financial constraints have prevented the expansion of the formal education system beyond a small minority (15-35%) of primary school age children, mainly in the urban areas, and the already large number of uneducated, illiterate adults is increasing every year. Furthermore, even the small percentage of the population served by the traditional primary education system may not acquire the attitudes, skills and knowledge most relevant to its environment and employment possibilities. Consequently, efforts are being made in a number of Sahelian countries to identify and develop effective and financially realistic means of providing for the basic learning needs of the majority of the population, both children and adults. A number of these efforts are being assisted by the World Bank.

As a complement to these national efforts, the Bank asked the Unesco Institute for Education to prepare a report which would provide an operational definition of basic education as applied to different target groups and develop a framework of analysis and methodology for the diagnosis of basic education needs and the elaboration of programs to meet these needs. The report was partly based on the experience already gained in attempting to identify and experiment with new approaches to basic education in Mali and Mauritania.

A draft of the report was discussed at a seminar, hosted by the Unesco Regional Office in Dakar in December 1976, to which educators and planners involved in basic education programs in Mali, Mauritania, Senegal, Niger, Upper Volta and Chad were invited. At this seminar, ideas and experiences regarding the development and implementation of basic education programs in the countries represented were discussed and the views of the participants were incorporated in the redrafting of the report.

The final report provides a synthesis of thinking regarding the concept of basic education in the Sahelian countries of West Africa and a tentative outline of the essential actions to be taken in determining basic education needs, designing and implementing experimental programs to meet these needs and evaluating the pilot projects as the basis for the development of national programs. As such the report represents the "state of the art" and it is hoped that it will assist in the development of a fuller understanding among education planners of the processes and problems involved in the provision of basic education in the least developed countries.

Mats Hultin Acting Director Education Department World Bank

### INTRODUCTION

# Background

Despite the efforts made by the developing countries in the 1960's to improve and extend their educational services, in particular on the primary level, many of them are confronted with unexpected and disappointing results:

- a) a high percentage of the primary school age population outside the urban areas is not yet covered by the system. This increases the already considerable number of illiterate adults;
- b) the population served by the education system often does not acquire the skills and knowledge considered desirable for the economic and social development at the local, regional or national levels;
- c) the resources required for the extension and adaptation of primary schooling in order to meet the needs of the population sectors concerned would probably exceed the financial capacity of most of these countries.

In recent years, awareness of these constraints has resulted in abundant literature suggesting new educational formulas that are not subject to the quantitative and qualitative limitations and to the financial consequences of the present system.

However, it should be noted that:

 a) the conceptual discussion is still of a general nature and the full implications of the propositions made have not yet been studied;

- b) the recommended schemes are the result of an eclectic accumulation of desirable characteristics lacking in the conventional programs. They are not based on a coherent and consistent idea of what education should provide for adults and children, and what should be the operational links between the different components of the overall system of education and training;
- c) these propositions are founded on the unverified assumption that, once generalized, they will be free from the constraints observed in the conventional educational services;
- d) owing to the absence of a clear definition of objectives, evaluation of these schemes is often difficult, even if its necessity has been recognized;
- e) there has been no systematic experimentation with alternative solutions adapted to the characteristics, needs and resources of a given country.

# 2. Objective and Scope of the Study

In the context of these reflections, the International Bank for Reconstruction and Development (IBRD) has assisted in the financing of programs aiming to work out and experiment with basic education schemes in two West African countries, Mali and Mauritania.

In connection with this work, IBRD has asked the Unesco Institute for Education in Hamburg to prepare a methodological report to be placed at the disposal of other countries of the Sahelian zone. This report was to facilitate:

- a) an analysis of minimum educational needs and an evaluation of activities capable of satisfying them;
- b) the preparation and implementation of basic education programs.

While the term "Basic Education" embraces a large number of informal, formal and nonformal educational activities which differ, according to local conditions, from one country and one region to the next, this study has focussed on nonformal programs for rural areas, since these correspond to the interests of the major part of the population in the predominantly rural developing countries to which this report is addressed.

# 3. Sources Used

The study is based primarily on available documentation on basic education, including both individual opinions and conclusions arrived at by international or regional meetings. Particularly valuable sources have been the Report of the Nairobi Seminar on Basic Education in East Africa (Unesco/Unicef 1974), the IBRD Education - Sector Working Paper (December 1974), the Report of the Mission on Basic Education to Agencies Participating in the Bellagio Meetings (Geneva 1975), the Report of the Conference of Ministers of African Member States at Lagos (Unesco 1976) and the various documents relating to Basic Education activities issued by Unesco, IBRD and Unicef.

Use has also been made of documentation dealing with activities closely linked with the notion and the aim of basic education, such as functional literacy. Mention should be made of the study by B. Dumont, "L'alphabétisation fonctionnelle au Mali" (Paris: UNESCO 1973), and "The Experimental World Literacy Programme: A Critical Assessment" (UNESCO/UNDP 1976). The third important source has been the work currently going on in Mali and Mauritania. Visits in these two countries, documents and contacts with leading educationists and those responsible for the current experiments in basic education have helped to orient this study.

Finally, this Report has benefited from an exchange of ideas and experiences at three meetings held successively with representatives of IBRD (Paris, 4-6 October 1976), the UNESCO services concerned (Paris, 20 October 1976), and African educationists engaged in such programs in Mali, Mauritania, Niger, Senegal, Upper Volta and Chad (seminar at Dakar, 13-17 December 1976 - see Appendix III for names of participants).

# 4. Presentation of the Report

The first two chapters are devoted, respectively, to a definition of the notion of basic education in terms of the characteristics it should have, and to the conditions and actions required for the preparation of programs consonant with these characteristics. The sequence of operations is presented in the third chapter. The subsequent chapters deal with the principal problems arising in the preparation and implementation of such programs. As this is a relatively new field where as yet no evaluation exists, and where time has not yet played its role of clarification, no normative solutions are proposed. Rather, lines of action are suggested and, in regard to selected crucial topics, current knowledge and experience are presented in the hope that they may help to work out the most appropriate solutions and to develop working methods.

### CHAPTER 1

### THE CONCEPT OF BASIC EDUCATION

Basic Education encompasses all activities that provide individuals with a certain minimum of education considered indispensable and possible for the society concerned at a given moment. The concept of basic education implies the will to prepare the entire population for daily life in a concrete manner. As a formal service, basic education means compulsory schooling covering the primary, and sometimes a few years of the secondary cycle. As a nonformal service, it comprises the educational activities designed for those sectors of the population which the school cannot, or could not, reach. But it may be asked whether in fact the school and also the nonformal activities satisfactorily answer the requirements of basic education.

# 1. Characteristics of Basic Education

The available documentation and the basic education programs already in operation stress a number of characteristics, which are summarized below (1).

a) The organization, content and methods of basic education must be flexible and adapted to the needs, values and characteristics of the human groups concerned.

Some of the these points have been taken from the following documents: a) Basic Education in East Africa. Paris: UNESCO/UNICEF, 1974; b) Rapport Final de la Conférenence des Ministres de l'Education des Etats Membres d'Afrique. Paris: UNESCO, 1976; c) Documents du Séminaire sur l'Education de Base, particularly the article by René Ochs, Quelques Réflexions sur l'Education de Base. Paris: UNESCO, June 1976.

Basic education programs are designed in accordance with the ecological, socio-economic and cultural characteristics of the zone concerned. Thus, in rural zones they take account of the way of life and the techniques employed by people engaged in agriculture, animal husbandry, fishing, etc. They also differ partially according to the target groups, whose needs vary according to age, sex, etc.; to their respective motivations, and to the demands made by their environment and work. Flexibility of the programs, their adaptation to very diverse needs evolving in time and place, is the precondition for their success. Because of this flexibility, one can speak of a national basic education program only in a very broad sense.

b) Basic education must provide an educational minimum

Clearly the definition of an educational minimum depends on the needs of the human group concerned and the resources available to the community. It is therefore very dependent on the conditions of time and place. Most frequently it includes (1):

- i) learning of elementary language skills indispensable for communication (reading, writing, speaking, understanding);
- ii) learning of basic mathematical concepts for use in working life and for the necessities of daily life;
- iii) acquisition of knowledge and functional skills useful in family life (household budget, health, child care, nutrition, sewing, manual work, etc.);
  - iv) initiation into the natural sciences to the extent necessary to comprehend natural phenomena occurring in the geographical environment. This initiation should help people to accept 'hanges in living conditions and to participate actively in transforming the environment;

Some points have been taken from Philip H. Coombs et al., New Paths to Learning for Rural Children and Youth. New York: International Council for Educational Development, 1973, pp. 13-17.

- v) acquisition of notions and development of practical skills that will facilitate remunerative activities (agriculture, fishing, animal husbandry, crafts, etc.);
- vi) initiation into civic life, in order to foster participation of the population in the social, economic and political activities of the community;
- vii) learning related to particular felt needs of the community not covered above.
  - c) Basic education should be an integral part of lifelong education

Within the framework of lifelong education all educational stages are integrated, and basic education constitutes the initial, fundamental phase of a process continuing throughout life. In providing all citizens, without distinction, with functional knowledge, skills, attitudes and values, basic education should contribute largely to their subsequent progress. Thus, the educational minimum outlined above appears to be the condition sine qua non for access to other forms of education. Around this minimum, any type of information can be organized into one system of thought, and forms of additional technical or cultural learning can be built upon it.

d) Basic education should provide functional, practical training linked with development programs, which will enable people to improve their living conditions

If the basic teaching (reading, writing, arithmetic) is related to real situations, it will serve as a vehicle for more functional knowledge and skills directly linked to the objectives of development programs (agricultural production, health, nutrition, etc.), and will lead to an improvement of living conditions. This seems particularly necessary in the education of adults. To attain this goal, close articulation with the diverse services pursuing similar ends is envisaged. Adequate coordination implies avoiding both gaps and overlapping of activities. Where the established services (agricultural production, fishing, health, etc.) already make a major contribution to the progress of the population, the role of basic education may be limited to harmonizing and complementing these activi-

ties, and to ensuring that the means employed are used to the maximum advantage. In any case, basic education seeks to equip its beneficiaries with the means of coping successfully with unfavourable natural or socio-economic conditions by increasing agricultural productivity to fight famine, for example, or by giving up unhealthy practices which are the roots of many illnesses. It attacks not the effects but the causes of evils and, consequently, endeavours to supply lasting, if not definitive solutions to the difficulties encountered by the population. In this sense, the educational component of any development program should be separated from the purely technical elements of that operation and integrated with the basic education program for the target area.

## e) Basic education should be a means of furthering the entire community

Furthering selected individuals often results in the departure of the most dynamic and most educated people from their community, to the loss of the group. The objective of basic education, however, is improvement of the living standard of everyone through promotion and enrichment of communal life. It must, therefore, not only encourage all individuals to participate in the activities of the community, but also help them to acquire the attitudes, competences and behaviours necessary for taking initiative and responsibility, which will permit them to play an active role within the community in such a manner as to make the best use of its resources and thus to increase its economic prosperity and its well-being in every field. These efforts may involve a change in the social organization of the community, so as to facilitate the emergence of leaders and a greater awareness of national problems. On a national scale, only a renovation of the community bases can lead to more intensive civic activity.

### f) Basic education must be a relatively low-cost educational service

If it makes optimal use of the resources of the community concerned, basic education could be an inexpensive service, both in regard to the educational material required, which may be simple, and in regard to personnel, which may receive a training different from that required for formal education and often consists of volunteers receiving a lower remuneration than does school personnel. Taking recourse to mass media, for example radio, basic education can achieve by no means negligible re-

sults at low unit cost. No additional material is required for practical training, since the concern for adaptation to the environment calls for the use of tools which are either in common use or are recommended by the development services, who are generally willing to supply them for demonstration purposes. Liaison with development activities also implies utilization of material at the disposal of the various sectors concerned, so that the costs are not to be borne by basic education. The cost per participant is further reduced by the fact that the minimum education provided by basic education programs is often of shorter duration than school type instruction.

### g) Basic education is a means of democratizing education

Owing to its low cost which allows its extension to a larger proportion of the population than can be covered by the formal school system, to the flexibility of its organization which facilitates access, and to its being open to all groups of the community, basic education is often considered the only means of increasing the people's opportunities to exercise their right to education.

Although the idea of basic education is used in industrialized countries also, it seems, in view of the above-mentioned characteristics, to be especially capable of answering the needs of developing countries. In fact, through the great variety of its possible adaptations to the environment and the possibility of reducing costs, it meets the desire of getting away from imported models unrelated to the concerns of these countries and too costly for widespread application.

# 2. Tentative Definition of Basic Education

This study attempts not so much to provide a universally valid definition, which in any case could be contested, but rather to pinpoint typical characteristics of basic education and to establish a working hypothesis. The formulas to be worked out should tend to translate these characteristics into practice, but adverse indications calling for a further search for solutions may also emerge.

The following elements of a definition can be identified:

a) Taking into account the resources at the disposal

of the society concerned, basic education provides a minimum educational content (knowledge, values, attitudes, skills), which must be defined in each particular case. This content should enable every beneficiary to understand the problems of his environment, to be aware of his rights and duties as a citizen, to participate in the socio-economic development of his community, and to expand his individual personality.

- b) Basic education is fundamental in the perspective of lifelong education because it constitutes its first phase, laying the foundation for further acquisitions.
- c) It is functional, because it seeks permanent, continuous adaptation of and to the environment by giving particular emphasis to the practical problems of life, such as health, nutrition, productive work, etc.
- d) It uses inexpensive educational formulas in order to reach a large public effectively and progressively.

This enumeration is by no means exhaustive, nor is it empirically verified. It merely condenses the most widely held ideas on the subject and demands a critical attitude on the part of the user.

# 3. Suitability of the Education System

The primary school system, especially in the Sahel countries, does not generally correspond to the above definition.

- Its guiding principles are not adapted to the needs, values and characteristics of the human groups concerned, and its organization is not flexible.
- The educational content provided is academically more ambitious but less practical and less concrete than is necessary to prepare the participants for everyday life within a given community.

- Its role in the overall structure of the formal system is mainly to prepare for secondary schooling.
- Its very high cost restricts its expansion and obstructs the democratization of education. Given the demographic growth (2%-3% per annum) characterizing the Sahelian region, it is difficult even to maintain the current enrolment ratio of 15-30% of the school age population.

In awareness of this state of affairs, the authorities started a process of reforming formal education. This effort is apparent in current research and in the existence of working groups. But many difficulties (opposition from many quarters, insufficient means, etc.) have so far impeded the achievement of the objectives pursued, as was frankly stated at the meeting held in May 1976 at Ouagadougou on the subject: "What kind of school for the Sahel?".

# 4. Nonformal Education Programs

In view of the shortcomings of the formal education system, many nonformal programs have been launched for those who were, or are, unable to attend school. These programs promote knowledge of the environment and aim to prepare the participants for coping with the practical problems of their lives. Most often these nonformal activities are localized and little known, and as they are run by various organizations, both public and private, they are not based on a systematic overall view of the problem to be solved on the national level. Nevertheless, they have a number of positive aspects:

- They embody a great richness of experience corresponding at least partially to the idea of basic education as defined above.
- They are in principle free from administrative complexity and capable of meeting urgent requirements without delay.

For these reasons they have been used as one of the principal sources for this report. The original solutions found in these nonformal programs might also inspire the reformers of the formal system, so that it could be turned into a better instrument for a better education.

### CHAPTER 2

### PRELIMINARY CONDITIONS AND ACTIONS

Before the work of designing programs is commenced, two things appear necessary: first, to ask whether conditions exist that will permit the planned effort to produce the greatest benefit, and second, to clarify the strategy to be employed by the responsible authorities.

### 1. Favourable Conditions

These conditions concern essentially

- a) a committed policy;
- b) the socio-economic structures;
- c) the linkage with development operations;
- d) the participation of the populace.

The two last-mentioned points are of particular interest for basic education programs designed for adolescents and adults.

### a) Committed policy

Although authorities generally express their dissatisfaction with results obtained from the school-type education system, they are not always sufficiently aware of the need to study seriously the problem of basic education as a whole. Occasionally such a study may be undertaken, but it often serves merely as a pretext for delaying the moment when decisions must be taken, in the hope that any thorough transformation of the existing system can be avoided. In such a case it is to be feared that the support for working out an appropriate scheme will

leave much to be desired, that neither the personnel nor the necessary material will be made available in time, and that nobody will oppose indefinite delays. Enmeshed in these difficulties, such work as is being done cannot yield the expected results, which will be a further reason for paying no attention to it. Even where interesting conclusions are reached, there is a whole arsenal of procrastinatory manoeuvres (meetings of successive commissions, various consultations, etc.) that may be used to block decisions until all interest in the problem has evaporated.

An effort of this kind is bound to arouse much apprehension, not only among authorities but also among practitioners in the educational system; their convictions and habits will be shaken. The pupils and their parents fear that they will be confronted with schemes lacking both prestige and career prospects. Those who are products of the existing system do not want the quality of the education they have received to be disparaged.

What is required, therefore, is a committed policy powerful and persevering enough to secure the compliance of those groups that are reluctant to change (see chap. 5) in order to ensure that the work is carried out under good conditions and that outcomes are objectively examined. Unless a crisis exists, only a very clear-cut policy can engender such commitment. All too often reform programs are considered only under the pressure of grave situations (maladaptation of the educational system to actual requirements, resulting in obstructed development, high unemployment, conflict situations or even a crisis serious enough to jeopardize the political regime itself), and then under conditions of congerous haste.

The first favourable condition for designing an overall system of basic education in the broad sense of the term, i.e. including both formal and informal activities, is thus a firm determination to examine the situation carefully and to take the steps necessary to generalize basic education for the entire population as far as available resources allow. However, it cannot reasonably be expected that the authorities will readily agree to revolutionize the existing school system. If they envisage implementing a subsidiary scheme for the children, adolescents and adults who are not covered by the school system, they already manifest a positive attitude, despite the obvious shortcomings.

### b) The socio-economic structures

A committed policy is, however, not enough. A population divided into very diversified social classes marked by prohibitions and privileges will not be ready to welcome an effort at basic education. Since by definition basic education aims to abolish inequality of opportunity, it carries within it a "charge" of democracy which cannot fail to frighten those who profit from social differences and are very often endowed with power by law. In addition to this direct opposition, there are other difficulties. To mention only one example: a basic education effort cannot achieve rapid improvement in the lot of the vast majority of the population, namely those who own no land, or not enough, and to whom no credit facilities are avail-For a considerable time they will not be able to make their voice heard, nor to exert any influence on decisions. However, in the Sahel region where access to land is a reality, the situation is especially favourable in this respect.

In short, basic education can take root with chances of success only in a more or less egalitarian society, or in one that seeks to become egalitarian. In that case, policy must be sufficiently strong to oppose privileges, set up agrarian structures (in predominantly rural countries) and adequate organizational facilities (credit, supplies, production, commercialization, facilities for saving money, etc.). If, broadly speaking, it may be said that any educational action is a political action, this applies particularly to basic education, through which every human being should become an active element of the social body.

### c) Linkage with development operations

Provided the two afore-mentioned conditions are fulfilled, the implementation of basic education programs adapted to local requirements (cultural and social needs, health needs, etc.) can be envisaged. But if it is accepted that the needs of man complement each other and must be satisfied as a whole, the economic dimension must also be taken into account. For people with extremely modest incomes, a rise in the standard of living through increased or improved production is a powerful motivation which will induce them to welcome a form of education that does not neglect this aspect. Furthermore, an educational action well integrated with a production effort may be an important factor in economic prosperity. It should be stressed that it is an illusion to hope that educational effort alone can

achieve an improvement in production. With its conventional means in personnel and material, neither the formal nor the non-formal education system is capable of transmitting the knowledge and skills indispensable in this domain. Even if they were, a continued production effort requires technical and financial support beyond the control of education authorities.

The link between education and production will not come about spontaneously. It must be sought with a will. That is why the schemes now being tried out in Mali, especially the experiment with basic education as a component of development operations, appear so promising. But even if basic education can be realized in conjunction with sectorial development operations, the best chances of success seem to exist when all efforts are combined within the framework of integrated development operations. The great advantage of integration is that the different aspects of development (education, health, production, commercialization, infrastructure, etc.) will on principle be tackled in a global and coherent manner. This will have several favourable implications, in particular:

- i) definition of priority objectives;
- ii) coordination of different development sectors;
- iii) follow-up for ex-participants.

The link with development operations will also permit both individuals and communities to face a higher expenditure on education as their incomes rise.

# i) Priority objectives

If concrete and functional content is to be given to basic education, particularly for adolescents and adults, the subjects chosen must relate to real situations. Linking these subjects with the priority objectives of integrated development will ensure their significance. In fact, these objectives result in principle from a serious analysis of the overall situation of the target area by specialists from the various development sectors (especially education), and from a decision by, or consultation with, the target population in order to avoid decisions taken only by specialists, however well intentioned or competent these may be in their own fields. On the basis of these priorities the themes that should underlie the educational activities in a given zone will be defined (see chap. 7, sec. 3). In this

way the link between education and development will be ensured, and the expenditure on basic education can be justifiably regarded not merely as a social one, but also as a support of overall development.

# ii) Coordination of the different development sectors

Since the activities of each sector should help to reach common priority objectives, their coordination can, and should develop harmoniously. Logically, any idea of competition should be abandoned in favour of mutual support which will render the work less costly and more effective. Thus, many functional aspects of basic education (for instance health education or practical agricultural work) can be carried out by the respective sectors, which usually have the required means in terms of personnel and equipment.

To ensure the effectiveness of this coordination, several non-exclusive modalities could be envisaged: creation of a "Coordination Committee" consisting of those responsible for the various sectors operating in the region (the administrative council of an autonomous development operation could serve this purpose), or integration of personnel (in Mali, the heads of the basic services of "Operation Groundnut" are already functioning as liaison agents between the regional heads of literacy programs and the volunteer "animateurs"). In any case, a minimum of decentralization is necessary for this coordination, as constant recourse to arbitration by the central authorities would complicate the functioning to such an extent that the very principle of the activities might be endangered and participation become impossible. Since it is unrealistic to think that excellent, egalitarian relations between the local activity leaders could develop spontaneously, it would be useful to avoid conflicts by giving one of them authority over the others and by institutionalizing direction and coordination through setting up appropriate structures.

# iii) Follow-up for ex-participants

Integration of the various sectors within development operations facilitates follow-up for those who have benefited from the educational activities. This follow-up may be envisaged in three ways:

 a) the ex-participants must reap some rewards, in the broad sense of the term, from the education they have received;

- b) some of them should benefit by acceding to more responsible positions;
- c) they should be offered continued education after having acquired the basic foundations (see chap. 9, sec. 1, para. 3).

With regard to the first point, it is clearly not sufficient to stimulate people's aspirations and increase their personal ability to satisfy them. The means necessary to attain the objectives that have been proposed to them must also be made available.

### Two examples may be given:

- Health education has emphasized the usefulness of vaccination to prevent epidemics and the necessity to go to a dispensary as soon as certain symptoms appear, or to take certain medication in case of illness. But if such instruction is not followed up by a vaccination campaign, if there is no medical dispensary within reasonable distance, nor a possibility of obtaining medicaments, the problem will not have been solved. The people concerned will merely feel frustrated.
- The same applies if peasants are taught more productive agricultural methods, but are then unable to obtain land, facilities or credit they need to put these methods into practice, or will not be supported by an infrastructure enabling them to profit from increased production.

In the framework of educational activities linked, or better, integrated with other development sectors, there would be no danger of such incoherence. The information and training provided would go hand in hand with the corresponding administration, equipment and infrastructure. The external productivity of basic education would thus be very high. In adverse conditions, on the other hand, a perfectly conceived and executed basic education program may end in failure.

As to the second point, transferring of responsibilities, this must be effected wherever feasible. One of the ultimate

aims is that the villagers themselves should take charge of the various functions necessary for the life of the village. The result will be not only a potent motivation of the population for basic education, but also a substantial diminution of the external, less efficient and costlier, administrative services.

Integrated development operations are thus an ideal precondition for establishing basic education. However, sectorial development efforts can also be fruitfully articulated with basic education. Through sensitization, and provision of ininformation and training it could support the launching and functioning of such operations as establishment of village pharmacies, agricultural information centres, rural libraries, etc.

### d) Participation of the Populace

To design and implement basic education programs it is essential that the people be made thoroughly aware of the need for them and willing to participate (see chap. 5). This task would be facilitated by the existence of institutions enabling the groups concerned to make decisions, or at least to give their opinions on activities affecting them. The Coordination Committee referred to above would not answer this purpose because it would consist of specialists only. The socio-political context plays a decisive role in the conception of these institutions. In a planned but decentralized regime, community councils should be involved in all activities, and the educational activities might be the responsibility of a specialized subcommittee. This would have the advantage of ensuring good integration of education with other development sectors. Such institutions might be established only in areas where a particular effort is planned. They could take the form of regional development committees with specialized sub-committees (health, education, agricultural production, etc.) in which the populace would be represented to express its more specific and pragmatic concerns. One could also - and that would be the simplest way set up a special institution for the educational sector alone (see chap. 9, sec. 2, para 3), but one in which the people would have their say.

# Determination of Strategic Elements

Before embarking on the vast exercise of designing basic education programs, it is necessary to define the objectives and priorities as well as the constraints they should take into

account. In fact, although every person should have an opportunity of exercising his right to basic education, the lack of human and material resources often obliges the responsible authorities to make a selection. These authorities may also have biases which lead them to consider basic education a matter of restricted importance rather than a solution of national significance.

For all these reasons, those responsible for designing basic education programs should have easy access to the top authorities. This would permit them to know what the latters' intentions are. The questions to be clarified are of the following type:

- a) Which are the special groups to be covered?
  - unschooled children;
  - illiterate youth and adults;
  - adults who have relapsed into illiteracy;
  - rural dwellers, urban dwellers, nomads?

This aspect will be dealt with in chapter six, section two.

- b) Which (if any) development sector is considered a priority sector?
  - health;
  - nutrition;
  - agricultural production;
  - a particular type of agricultural production;
  - crafts production;
  - a particular type of crafts production?
- c) In striving to attain the production objectives, what should the emphasis be?
  - modernization of traditional enterprises or;

- creation of industrial plants?
- d) By which method is the production objective to be achieved?
  - through the conventional type of organization;
  - through rural services aiming at community development?
- e) What are the limits of the envisaged budget?
- f) Is recourse to foreign aid to be considered?

On the basis of the above information the work would be oriented by the intentions of the authorities. This does not mean, however, that those responsible for designing the basic education programs should passively accept the authorities' wishes. Rather, they should thoroughly inform them on the possibilities and limitations of basic education and stress the importance of pragmatic, concerted, experimental, global and integrated action. The present report has been written on the assumption that this is the approach which is followed.

It must be emphasized that the desire to disseminate ideas, to call the attention of large sections of the population to needed educational innovations, may be regarded by the authorities as sufficient justification for basic education programs.

### CHAPTER 3

### OPERATIONS TO BE ACCOMPLISHED

Once the strategic elements have been determined, a number of operations have to be carried out in the process of designing and implementing basic education programs. The actions proposed below may help to place the elements discussed in the chapters that follow into a logical sequence.

The great number of factors to be considered, and the host of conditions that may affect them, make it impossible to cover every situation. Therefore, only those operations that are generally required are indicated. They should be complemented by others which meet the specific conditions of the country concerned. Some of these could be interchanged or carried out simultaneously; this may actually be necessary for the sake of efficiency.

Four phases may be distinguished:

- 1. Preparatory tasks;
- Designing experimental programs;
- Carrying out the experimentation;
- 4. Working out a plan for general application.

# 1. Preparatory Tasks

To accomplish the necessary work, a series of preparatory jobs must be done:

- Definition of the tasks of the specialists participating in the work;

- Identification or creation of institutions which will direct and facilitate the work and enable the results to be utilized;
- Estimation of essential human and material resources.

This point, which involves organization rather than the substance of the matter, will be discussed in Appendix II.

# 2. Designing Experimental Programs

a) Sensitization (1) (see chap. 5, sec. 6, para. 1)

Some of the tasks to be accomplished in the designing phase (inventory and evaluation of educational activities, list of development projects, definition of educational needs, etc.) require the participation, and hence the *sensitization*, of the central and local services of the ministries concerned, of the officials in charge of development operations, and also of the populations involved.

b) Evaluation of the educational situation (see chap. 4)

The work of designing programs should be based on adequate knowledge of the educational situation. Consequently, data should be collected on a national level, and all educational activities relevant to basic education should be listed and evaluated.

c) Listing of development operations

As linkage with development operations is a favourable factor, a survey of such operations should be made before the areas in which the experiments are to be carried out are identified.

The Word "sensitization" is used in this translation of the original French study to render the French term sensibilization which signifies cognitive awareness of a problem, emotional involvement and willingness to take remedial action.

# d) Identification of the areas of experimentation and of the target groups (see chap. 6)

The approach followed being functional, pragmatic and experimental, suitable basic education programs can only be worked out under reference to real situations. It is, therefore, essential to identify both the target areas in which experimental basic education programs could be launched, and the target groups.

A number of criteria may be used for identifying the areas: language, ethnicity, population density, mode of production, way of life and social structure, ecology, etc. Frequently, the educational situation and development prospects are the determining elements in this identification.

Depending on the objectives pursued, basic education programs may be designed for the entire population of a region or only for certain target groups. Even in the first case, a distinction between the different groups to be involved is called for in order to answer their respective specific needs. This distinction may be by age, sex, occupation, level of education, etc.

### e) Definition of educational needs (see chap. 7)

When the areas for experimentation and the target groups have been determined, the educational needs of the latter should be identified on the basis of:

- i) data collected on the national level concerning educational needs, the educational situation, and where applicable, an evaluation of the existing educational activities in the target areas and for the target groups concerned;
- ii) the results of a specific inquiry relating to these areas and groups.

### f) Designing the programs

On the basis of the above-mentioned information, working groups (see Appendix II) will have to consider what kind of program would be desirable for each area and each target group. They should then define the objectives to be pursued, the content and methods, the people to be covered, the personnel and

material required, the kinds of institution desired, the methods and instruments of evaluation, etc.

Obviously, these programs can only be amendments of previous successful operations. But the point is to be efficient, not to innovate without a reason. Though at this stage imagination should be given a free rein to construct new combinations of all the elements involved, a subsequent rigorous sorting-out of the results of this "brain-storming" is imperative if fanciful and unrealistic propositions are to be avoided. It must always be borne in mind that the fundamental criterion for choices to be made is suitability for the needs and the resources of the population concerned.

Before the programs are finalized, they should be discussed at a series of consultative meetings (see chap. 5, sec. 6, para. 2) and submitted to the competent authorities for decision.

# 3. Implementation of the Experimental Programs

The following remarks are confined to certain aspects of this phase which are not dealt with elsewhere in this study.

# a) Objectives of the experimentation

No basic education program should be generalized until it has been adequately tried out. The objective of the experimentation is to obtain indications for adjusting the contents and methods of the programs as well as their various operational aspects (organization, recruitment, training and management of the staff, preparation and diffusion of educational material, etc.), in the light of difficulties met with in their application at certain points in the target area.

### b) Psychological preparation (see chap. 6, sec. 3)

What is required at this stage is a sensitization of the groups directly involved in the experimentation (the population concerned, various authorities, development agents in the areas involved, etc.) in order to overcome any reluctance which would impede its normal course.

c) Coverage

Within each zone, the experimentation may cover:

- i) either one entire part of the target area; this would be a kind of simulation of the generalization phase, since the problems of implementation would then emerge in all their complexity;
- ii) or certain representative points; this would allow the programs to be tested in various types of situation (existence of supporting activities, particular problems of a cultural, social or economic nature, cooperative or uncooperative attitude of the population, access facilities, etc.).

There must already be concern in the experimental phase for establishing the structures that will be needed in the generalization phase. For this reason, an effort must be made to organize the experimental programs around resource centres where the common activities (administration, in-service training, pilot activities, etc.) can be grouped, and which will serve as liaison points between the experimental centres and the monitoring teams.

d) Preparation of instructional material (see chap. 8, sec. 2)

The instructional material (leaflets and brochures, teaching manuals, radio broadcasts, etc.) should be prepared on the basis of the content indicated above in section 'f'. Participation of the personnel (administrators and teachers) in this work will enable them to get a better understanding of the spirit of basic education and to test the model lessons before these are printed.

Nor should it be forgotten that there is a need for distributing in good time the equipment and individual as well as collective material necessary for launching the experiments.

e) Preparation of personnel (see chap. 8, sec. 1)

The selection of staff, in particular of the administrative personnel, their psychological preparation, their general and

educational training will determine the success of the experimentation.

f) Preparation of infrastructure (see chap. 8, sec. 3)

In order to reduce costs, it is necessary to make the maximum possible use of existing facilities. Where alterations or new constructions are indispensable, participation of the communities concerned would help to limit the expenditure appreciably.

g) Evaluation of experimentation (see chap. 4)

The experimentation can only be justified if it is continusouly evaluated, and if the different aspects of the programs are adjusted in accordance with this evaluation.

# 4. Drawing up the Plan for Generalization

Given the above-mentioned evaluation, it will be possible to assess the validity of the experimental programs on which a generalized plan might be based. In this plan, five points should receive particular attention:

- a) creation of the permanent institutions required for the promotion of basic education;
- b) the rhythm and modalities required to multiply the basic education centres in order to extend the programs over the whole of the territory;
- c) training of a sufficient number of competent monitors;
- d) financial requirements of the generalized plan;
- e) possible adaptation of school education in accordance with the results of the experimental, basic education plan.

The last point should receive special attention from the responsible educationists and the authorities (chap. 9, sec. 2, para. 4).

The procedure to be followed in this phase will be analo-

gous to that described in section 2, paragraph 'f' above, especially in respect of the use of ad hoc working groups, the drawing up of a preliminary report, its submission to the interministerial committee, consultation of the groups involved and finalization of the report (see chap. 5, sec. 6, para. 2).

#### CHAPTER 4

#### EVALUATION IN THE CONTEXT OF A BASIC EDUCATION PROGRAM

In the domain of education, evaluation comprises such a wide variety of components, activities and functions that it is difficult to make neat, clear-cut statements. This is particularly true of the evaluation of nonformal education activities. Broadly, the purpose of evaluation is to determine in what measure the results, the means, the conditions and the consequences of the educative action are satisfactory. Evaluation may be examined under four different aspects:

- 1. Object of evaluation;
- 2. Goal of evaluation:
- 3. Evaluation criteria;
- 4. Techniques and procedures of evaluation.

### The Object of Evaluation

In schematic terms, the following should be distinguished in any educational activity:

- Objectives to be achieved;
- Outcomes obtained;
- Educational activity itself, which forms the link between objectives and outcomes and comprises the means applied and the procedures used;
- Resources required;

- Implications of the activity.

The simplest form of evaluation is to compare the outcomes of a given activity with its objectives. Evaluation of resources used and actual results is not difficult. The former include all the human, financial and material resources required to achieve the desired outcomes. It is important to evaluate them in order to assess the feasibility of the operation and to obtain hypothetical evidence of the value of the outcomes in cases where a direct evaluation of results is not possible.

By "actual results" we mean the immediate or side effects, foreseen or unforeseen, of the operation. These may be positive or negative. As an example of a negative effect one might mention the behaviour of a teachers' trade union which opposes the employment of less qualified volunteers in a basic education program.

Educational activities take place on different levels, implying different connotations with regard to the agents, the components and the objectives. For example, the objectives of a basic education program may have the following nuances:

- At the national level: to raise the educational standard of the entire population:
- At the regional level: to contribute to the economic development of the area concerned;
- At the institutional level: to improve the living conditions of a specific community;
- At the individual level: to provide every individual with a certain minimum of skills, knowledge and attitudes.

Consequently, the objects of evaluation may also differ at each level, at the individual level, for instance, they may be the various types of knowledge, attitudes and skills developed in each program covering certain learning areas. At the institutional level, they may be factors affecting the educational process, such as premises, teachers, parents, community, local authorities, living conditions, etc. At the regional level, there might be as many objects of evaluation as there are regional conditions apt to influence the program, e.g. the

various development operations with which basic education may be linked.

Comparisons of the outcomes with the objectives of educational activities must include the nature of the outcomes. Every action produces both immediate and long-term outcomes. The former, which are easier to measure, are of value insofar as they contribute to the desired long-term effects on a personal, cultural, professional, financial, social, economic or political level. In a basic education program, for example, it is comparatively easy to evaluate the skills and knowledge acquired in the course of learning to read and write a local language, but more important - and at the same time more difficult to evaluate - are the long-term outcomes of that learning in terms of personal, communal or national development.

To obtain a real and useful evaluation, all aspects of an educational action should be considered, and in every case, the object of the evaluation should be clearly and precisely defined.

### 2. The Purpose and Function of Evaluation

Evaluation is an instrument for improving educational activity. It may form part of the activity itself, in order to permit periodical adjustments to be made. This would be formative evaluation. It is used to measure, for instance, the progress in pupils' learning so as to be able to identify and remedy weaknesses or gaps in the process.

In other cases, improvement may take the form of a later, independent but analogous activity. This would be summative evaluation. It is normally used when, for example, new syllabi, text books, school buildings, educational services, educational reforms, etc. are prepared or introduced, either to fill a gap or to replace outdated material or services.

Each of these two types of evaluation, the common objective of which is to improve educational activities, fulfils a specific function and applies different principles in the choice of objects, criteria and procedures. Neither can be entirely substituted for the other.

As regards basic education programs, three situations may be distinguished in each of which evaluation plays a different role and where the objects, criteria and procedures do not fully coincide.

- a) The first of these situations relates to the analyses of existing services that could be utilized for basic education. This would be a case of summative evaluation, with the aim of appraising the positive and negative aspects of the existing service in the light of the nature, function and characteristics of basic education programs. The aim is not to improve the service in terms of its original objectives, but rather to assess the possibility of adapting it to new ones. The selection of services to be evaluated (Koranic schools, functional literacy programs, etc.) and the criteria to be employed are determined by the conception of basic education that has been adopted, by the nature of the service to be evaluated, and especially by the specific decision which is to be guided by the evaluation. Through this evaluation, better understanding should be achieved of:
  - the extent to which the service concerned satisfies the educational needs of a certain population group in a certain area;
  - the principal weaknesses of the service;
  - which of its aspects are compatible with basic education;
  - which of its aspects could be adapted towards basic education.
- b) Another situation is that where formative evaluation takes place during the experimentation phase of a basic education program, with the major objective of appraising and adjusting the characteristics and modalities of implementation of the program concerned with a view to generalization.
- c) Thirdly, evaluation of a formative and continuous nature should be carried out in the course of generalization of a program on the national or regional level. In that case, it is a means of remaining faithful to the original objectives of

the action despite its extension, of monitoring its outcomes and of keeping the volume of resources necessary for its implementation at a low level.

### 3. The Criteria for Evaluation

The norms or criteria of evaluation vary according to its object. If, for example, the evaluation concentrates on outcomes, the norm must derive from the original objectives of the educational activity. Theoretically, the agreement of divergence of outcomes and objectives constitute the core of the evaluation. On the other hand, if it concentrates on means, resources and implications, the criteria must derive from several sources, in particular from policy decisions and values and customs of the society in which the educational activity is situated.

The purpose of the evaluation also influences the selection of criteria. If the evaluation aims at facilitating a policy decision at the national level (such as introduction of a nonformal basic education program which might possibly lead to dualism in the educational system), there are many criteria from a very large domain. But if the purpose of the evaluation is a more restricted one, such as revision of reading material for a basic education program in a local language, the criteria are more specific and technical.

The evaluation criteria are a set of very often antagonistic norms: for example, the goal of maximum development of ability to read and to write, on the one hand, and that of achieving this result in the shortest possible time on the other hand. The same applies to the conflict between the objectives of achieving literacy and acquisition of functional skills, knowledge and attitudes; and the necessity to limit expenditure. Evaluation on the basis of a set of criteria of this kind compels the evaluator to make certain compromises which must be determined by the purpose of the evaluation.

Concretely, in the case of nonformal basic education the criteria must be derived from the characteristics indicated in chapter 1. They should be used to assess whether the activities under consideration:

i) are adapted to the needs of the human groups concerned.

- ii) are designed for those who were, or are, unable to enter the formal school system;
- iii) form part of the educational minimum in a perspective of lifelong education;
  - iv) constitute a useful and practical education which, through being related to development problems, will help to improve living conditions;
    - v) can be considered as a means of promoting the community;
  - vi) constitute a low-cost educational service;
- vii) contribute to the democratization of education.

### 4. The Techniques and Procedures of Evaluation

Although the techniques and procedures of evaluation may vary substantially according to its object and purpose, it is possible to identify certain categories of task which must be accomplished by every type of evaluation.

a) Precise definition of the object of evaluation

Such definition implies identification of the categories of desired outcome. For basic education, these may relate to:

- i) the number of people covered;
- ii) the results achieved in reading, writing, arithmetic;
- iii) the results achieved in the domain of functional, practical skills (answers to the needs and aspirations of the participants which contribute to their individual progress and to that of the community);
  - iv) the articulation with development programs (at the level of cooperation and at the level of operation);

- v) the adequacy of the instructional material used, from point of view of the participants and from that of the instructors;
- vi) the efficiency of the instructional methods applied;
- vii) the competence of the instructors;
- - ix) the efficiency of organization and working procedure;
    - x) the articulation with formal education.

Where the evaluation concerns an experimental phase, continuous cost evaluation is of prime importance for decisions regarding generalization of the program.

b) Identification of the information required and its sources

Most of the required information on educational activities comes under one of the following categories:

- i) target groups;
- ii) teaching programs and methods;
- iii) educational means: personnel, materials,
   equipment;
  - iv) institutions: planning, organization, framework;
    - v) financing;
  - vi) relations with the community;
- vii) relations with the subsystem of education to which the activity concerned belongs, in terms of norms, control, supplies of materials and equipment, periodic communication, etc.);

- viii) relationship with the educational system as a whole;
  - ix) relationship with other subsystems of overall development (agricultural production, health, nutrition, etc.).

In order to proceed systematically in the collection of these data, it is advisable to begin by establishing a list of possible sources by categories:

- i) various services of the National Ministries (Education, Agriculture or Rural Development, Planning and Health);
- ii) development agencies and promotion groups;
- iii) local administrative authorities;
  - iv) members of the community concerned;
    - v) others.
    - c) Instruments and techniques

A certain number of instruments must be used to collect and analyze the necessary information: tests, interviews, documents (statistics, regulations, etc.), inquiries addressed to the communities or the leaders of development operations in the form of structured interviews, questionnaires, etc.

The problem of evaluation with a view to designing basic education programs is a complex one calling for much thought in selecting adequate techniques and, where necessary, working out original ones suitable for the area in question and the specific conditions under which the work will be carried out. Scientific rigour is certainly needed, especially in such technical aspects as choosing samples for a selective inquiry, or in determining the objectives to be achieved by each of the techniques employed. However, great flexibility is also required, since interesting and unexpected information may emerge from an open dialogue in a non-controlled situation which leaves room for free expression.

The Case of Mali

The following techniques are presented as a concrete example. They were used in Mali for the evaluation of functional literacy programs; some of them involve an evaluation of past activities as well as the establishment of a permanent evaluation system.

- For each of the centres a file i) Central file. is kept in which information is entered on the village concerned, (population, type, ethnic group, religion, communications, geographic location, production system, village activities, social services, educational services, etc.) and on the centre itself (creation, equipment, timetable of courses, rate of attendance by the participants, characteristics of the personnel involved, etc.). This file serves as a basis for discussions, with the instructors as well as with the village authorities, concerning the functioning of the centre, the benefit the participants and the village as a whole derive from it, and the means of solving existing problems in order to make the centre a better instrument in the service of the community.
- ii) Sample inquiries at the local level. They are used to complement and improve the information referred to under i), on the impact of the educational activity on the village, the changes observed in the community, and the feasibility of transferring certain responsibilities (cooperatives, diffusion of agricultural methods, preventive health measures, etc.) to ex-participants.
- iii) Individual log books. These must be filled in by every participant. They consist of periodic tests, the results of which reveal the rhythm of progress achieved in each of the areas covered by the program. They also help to assess individual aptitude and maturity and to verify the effectiveness of the methods employed.
  - iv) Talks with the participants. These conversations have the aim of eliciting the participants' reactions, their motivation regarding the education

they are receiving, and the development of their community; of analyzing the gaps and deficiencies they have observed in the running of the educational program, of hearing their opinions on the progress and possible prolongation of the program.

- v) Self-evaluation seminars. The instructors and leaders of the centres discuss the information previously obtained, and attempt to define the modifications that should be introduced in the content, methods or organization of the activity in order to bring it more into accord with the aspirations of the population.
- d) Carrying out the evaluation

Evaluation demands a special mental attitude of the personnel involved. An effort at analysis of the observed facts is required in order to understand the underlying interactions. Further, they must make an effort at synthesis to be able to draw conclusions from the work done in terms of proposals for action.

As evaluation should be the central concern of the team members, an ability to accomplish this task should be the principal criterion in selecting them. When complex problems have to be solved, it may be necessary to call in one or two evaluation specialists as consultants.

Carrying out inquiries demands a large number of personnel, including instructors actually involved in the activity studied and/or occasional collaborators (students, officials, etc.). They must be prepared for their tasks in seminars where the objective of the program, the place of evaluation within it and the methods and techniques employed will be explained to them. There they will be familiarized with the instruments to be used. These seminars will provide an opportunity of adjusting the instruments in accordance with the aptitudes and opinions of the data collectors. Many of them, especially the instructors, will know the terrain very well and will thus be in a position to draw attention to difficulties that had until then been overlooked. This participation in working out the modalities of an inquiry may not only improve its process and results, but may also increase the collaborators' interest in their work.

The reproduction of the finalized instruments of evaluation raises problems concerning the secretariat personnel and the material which must also be taken into account.

#### e) Difficulties to be expected

The accomplishment of so vast and complete an evaluation program may present several difficulties.

- i) While the methodology of evaluation in the cognitive domain of academic disciplines is known, there is as yet no established methodology for evaluating attitudes and skills in the different sectors (production, health, nutrition, etc.) which will advance the welfare of individuals and communities;
- ii) In the countries in which basic education programs are launched data are usually incomplete, access to modern means of data processing is far from easy, and the qualified personnel necessary to carry out evaluation is hard to find. This often necessitates recourse to foreign personnel who may not be very familiar with local conditions;
- iii) The time allowed for the preparation of a program is often too short to compensate for the lack of basic data and for inadequate qualification of available personnel;
  - iv) Evaluation requires substantial resources, and uninformed people may feel that there is a discrepancy between a costly operation and the desire to establish "low-cost" educational models. This feeling may, wrongly, provoke a reticent attitude towards evaluation;
    - v) If evaluation is conducted by people outside the program, or worse, by foreigners, this may seem a disquieting intrusion in the eyes of the practitioners and cause them to adapt a hostile attitude from the start.

#### f) Evaluation strategy

In view of the importance evaluation has for designing basic education programs, and considering the vast field to be covered and the unusual nature of the work, a realistic strategy must be adopted, i.e. a strategy taking into account the available resources and the misgivings that have to be overcome.

- i) It is advisable that the evaluation work be as far as possible conducted by nationals, and that it should in large part be carried out by members of the services concerned;
- ii) Such integration of the permanent national personnel will have two great advantages: sensitization and training of the personnel which will constitute the nucleus of future permanent evaluation cells, and lower cost of the operation;
- iii) To achieve this integration, it is necessary to select from the range of possible instruments those that can be used without difficulty by people who do not have the desired qualifications to start with;
  - iv) A rigorous selection, at the very beginning, of educational activities that are significant for basic education will make it possible to limit the range of necessary evaluation work during the first phase. In the experimentation phase no further economy can be made.

#### g) Continuous evaluation

Flexibility, an indispensable characteristic of basic education programs, should be manifest not only in a diversification of contents and methods according to the target area or target group concerned, but also in the ability to evolve an answer to requirements changing over the years due to social, economic or cultural reasons. A machinery for continuous evaluation is, therefore necessary to check whether the programs adequately meet the requirements and to facilitate their adjustment where necessary.

CHAPTER 5

#### SENSITIZATION - PARTICIPATION

### 1. Necessity

A basic education program cannot result from the work of specialists alone, however genuine their intention of helping the human groups is concerned. To attain the objectives pursued, all those who have an interest in basic education (beneficiaries, executors, decision makers, for example) must be involved at every phase. All too often the populace have neither an opportunity nor the means to express their opinions. may be ready to make an appreciable effort to improve their way of life, but do not know when and how to go about it. There is thus a need for developing dynamic and comprehensive public relations activities beneficial to all. Such activities may play a considerable role in enlightening and stimulating the masses by making them aware of both their needs and the efforts they themselves can make to satisfy these needs. In fact, the introduction of inexpensive programs (indispensable for diffusing basic education), cannot be envisaged without the active participation of the people for whose benefit they are intended.

# 2. Groups to be Sensitized

The process of sensitization must cover many groups whose composition partially varies according to the phase of the project. They include:

- a) the permanent or temporary personnel engaged in working out the programs;
- b) the officials in various ministries, public services and private organizations who are in-

volved in activities with which basic education will have to be articulated (primary education, planning, agricultural development, health, etc.), or whose support may be needed for the achievement of basic education (directors of functional literacy programs, heads of Koranic schools in the case of Mali and Mauritania), or whose own activities will be affected by the implementation of basic education programs (teacher training, for example);

- c) the specialists, individuals or groups working in fields useful to the study (ethnolinguists, rural economists, nutritionists, hygiene educators, etc.), who may orient their research towards a perspective of basic education;
- d) the various levels of teaching, monitoring or supervisory personnel with whose help a basic education program may be implemented;
- e) the groups to be served by basic education programs, in particular those including people with representative or decision-making functions (community leaders, religious and political leaders, etc.);
- f) the heads of administrative services whose functions cover the entire public services of their territory, and whose support may be crucial for designing as well as for implementing the programs because of their knowledge of local problems and the authority and resources at their disposal.

### 3. Means of Sensitization

In this context, sensitization is not an accessory task to which only marginal means should be devoted. Some of the following modalities may be envisaged:

a) formal relations with the various ministerial departments through the intermediary of the

- interministerial committee (see Appendix II, sec. 2, para. c);
- b) individual contacts and working relationships with leading personalities of the public and private organizations concerned;
- c) talks and meetings with individuals and groups at the local level, especially in connection with inspections, surveys, etc., but also in the form of seminars, conferences, organized educational discussions:
- d) utilization of mass media (radio, press, etc.) to inform public opinion and provide feedback:
- e) distribution of a periodical bulletin explaining in simple, clear terms the objectives pursued, the stage the work has reached and the results obtained. This document should be supplied to all persons, groups and organizations affected by the design of the programs.

In every case it would be advisable to use the channels provided by all those groups, associations and political parties through which a large part of the population can be relatively easily reached. Some initial effort is, of course, required to secure their collaboration; once obtained it augurs well for the attitude they will adopt towards later activities.

### 4. Difficulties to be Expected

These difficulties are due to two main reasons: the multiplicity of individuals and groups that must be reached, and the divergence of their respective interests.

#### a) Size of the task

The task of securing participation, which must be considered the integrating factor of the work to be done by the team charged with designing the programs, is both an indispensable and a considerable one. A careful analysis will reveal the large number of individuals and groups that have to be reached at each phase of the work. This calls for particular skills

and great ability to make contacts, which is not always an outstanding characteristic of specialists, as well as for much time and a certain amount of material resources. Concentrating on their technical tasks, the members of the team are in danger of neglecting this capital aspect.

#### b) Conflicting interests

As many of the individuals and groups involved have very divergent concerns and interests, an element of complexity enters which makes the task of sensitization still more difficult. It is impossible to work out a form of presentation of the project that would be acceptable to all. Obviously, no misleading statements should be made, but account must be taken of the sensibilities and divergent interests of the groups involved, of the widespread opposition to innovations which many are afraid they may not be able to master. The choice of arguments thus depends on the groups to whom they are addressed, and this renders the public relations task a particularly delicate job.

# 5. Strategy for Sensitization

In view of the importance of the task, its vast scope and complexity, no team can be expected to accomplish it by mere improvisation. An attempt to do so might, in fact, have disastrous results. A strategy is therefore required to attain the desired objectives at the various levels.

- a) Skill in public relations should be taken into consideration when selecting the leader of the operation and the members of the permanent team.
- b) For each phase of the work a priority list of the individuals and groups (especially the leaders of these groups) to be won over should be drawn up so as not to fritter away limited financial resources.
- c) The information to be presented and the material to be used for each homogeneous category of discussion partners must be prepared.
- d) Each individual contact and every meeting necessary for the technical execution of the project should be taken as an opportunity for the team

members to enlighten their discussion partner or partners. In this respect the following points are important:

- No attempt should be made to tell everybody everything, nor should it be forgotten that the manner in which something is said, and the moment at which it is said, are of significance.
- ii) Until positive results have been obtained, it may be desirable to exercise great discretion in order not to arouse from the very start the opposition of groups who fear that they may be adversely affected by the introduction of new educational schemes.

In Mauritani, for example, sensitization during the preparation phase was purposely restricted to those individuals or groups whose cooperation was necessary. Information was to be generalized later when results of the experiments would be available.

### 6. Specific Sensitization

At three stages of the process a more sustained sensitization effort should be made: during the definition of educational needs and examination of the educational situation, during the preparation of programs, and during their implementation.

 a) Sensitization at the stage of definition of educational needs and examination of the educational situation

The work preceding the preparation of programs requires the participation of the national services of the Ministries of Education, Planning, Agriculture and Health, the leaders of development operations and the population which is being surveyed. All of them must, consequently, be informed of the objectives of the surveys in order to stimulate their interest. Then they must be induced to say what they know and what they think. Finally - and this applies particularly to the teaching personnel - they must be persuaded to participate in the evaluation

of significant educational activities.

#### b) Consultations and preparation of the programs

Notwithstanding all the precautions taken in the preparatory phase to ascertain the opinions of the groups concerned, it is evident that these opinions (which relate only to some of the aspects covered) do not eliminate the need for a series of consultations on the report, presenting the recommended program or programs as a whole.

This report should first be submitted to the interministerial committee (see Annex II, sec. 2, para. c), and then communicated to various groups (political parties, trade unions, religious authorities, parents, teaching personnel, etc.) so as to obtain a very wide range of reactions. On the basis of all the opinions expressed, the committee should give the team instructions which would enable them to finalize the program and define the practical modalities of implementation, such as location of the activities, target population, volume of personnel and material required, methods and instruments of evaluation, etc. The whole should then be submitted to the competent authorities for decision.

### c) Preliminary psychological preparation for introduction of the programs

To facilitate the launching of the operation and to test the modalities of securing the participation of the population in implementing the proposed program, intensive psychological preparation must be undertaken. It could use several of the methods indicated above (see sec. 3). The targets would be the population concerned, especially those people whose voice counts (dignitaries, political leaders, and the like), the administrative authorities who could provide logistic support, the local leaders of the various development activities (production, health, etc.) with whom close relations are necessary, and above all, the categories of people who could be directly involved (e.g. those who already have a certain level of education and from among whom teachers could be chosen).

## d) Motivation and perseverance of the target groups

The fact that unsatisfied educational needs exist is sometimes felt, but most often in a diffuse fashion rarely translated into a desire for action. In such conditions, the problem

is to induce the populace to think, individually and collectively, about ways of satisfying these needs. The envisaged opinion survey aiming to identify them (see chap. 7, sec. 2) constitutes a means of creating awareness. But it must also tend to make the individuals concerned understand that they belong to a sufficiently homogeneous group in accordance with the criteria that have been mentioned (see chap. 6, sec. 2), and that it is necessary for them to participate persistently in the basic education program if they wish to achieve, within a given group, satisfaction of these felt needs.

An effort to sensitize the masses through appropriate radio broadcasts, publicity work based on the various available means of diffusion, (party organizations, theatre, popular songs, etc.) should help to create a desire for education where necessary, and intensify it in every case. Clearly, maximum motivation will result from realization that the knowledge gained will be of practical use, that it will enable the people to calculate their taxes, to check the weight of products they sell, to benefit from taking over certain responsibilities within the community, etc. Furthermore, this sensitization effort would tend to put an end to the manoeuvres of those who oppose, in one way or another, attendance of their children and their wives at basic education programs. Even where there was adequate motivation to start with, it has often been found that increasing lassitude and absenteeism developed in the course of the programs. This may be explained by the daily duties and fatigue, especially at peak periods of agricultural work, by family obligations and by the difficulty for some to maintain standards. There is reason to believe that sufficient flexibility in the organization of the activities would offer suitable solutions, such as adaptation of the educational schedules to the rhythm of work and commitment of the various target groups. Paradoxically, however, it has been found that periods of intensive work are propitious for basic education activities because the populace is gathered together at such times.

Fishermen and herdsmen, with their frequent moves, pose a particular difficult problem unless an instructor can be chosen from the group itself.

#### CHAPTER 6

### IDENTIFICATION OF THE AREA TO BE SERVED AND THE TARGET GROUPS

The only way to develop suitable basic education programs is to relate them to real situations, i.e. to the areas in which the programs are to be implemented and the groups for whom they are destined. These target areas and target groups might be determined by the authorities, and this would impose a constraint on the project leaders. However, if the leaders are allowed to identify area and group, they might be guided by the following consideration:

## 1. <u>Identification of the Areas to be Covered by the Program</u>

a) Criteria for identification

According to circumstances, various criteria or combinations thereof may be used to identify these areas. The following may be mentioned:

- i) Language. For the sake of convenience, (preparation and production of printed material), areas in which the same language is spoken may by preferable. Conversely, territories with several different languages may facilitate subsequent generalization.
- ii) Ethnic groups. Specific groups having linguistic, cultural and historic characteristics in common may be given priority. In most cases, the selection of such groups depends, however, on decisions unconnected with educational policy.
- iii) Population density. Both overpopulation, which

necessitates an intensification of food producation, and underpopulation, which permits colonization of the available land by immigrants, may receive particular attention.

- iv) Mode of production. Predominance of either traditional family farming or industrialized plantations may be a reason for choosing a particular area with the aim of modernizing the former or further improving the latter.
  - v) Way of life and social structure. Special interest may be taken in fishermen, nomads, etc., or in a community which finds it difficult to regain a certain equilibrium in its social structure (e.g. malaise of the young in a patriarchal-type society).
- vi) Ecology. The choice of geographical area belonging to each of the large ecological areas of the national territory makes it possible later to extend the program in accordance with prevailing natural conditions (climate, geological formation, fauna, flora, etc.).

In addition to these characteristics of a region, two other criteria should be taken into consideration in making the final choice. They relate to development operations and the educational situation. Frequently experimentation areas are chosen on the basis of these two criteria alone.

b) Development operations

The following elements of each operation should be investigated:

- i) dominant sector (agriculture, education, health, nutrition, crafts, etc.);
- ii) nature and objectives of the operation (increase of production, fight against epidemics, family planning, functional literacy, etc.);
- iii) effort at intersectorial articulation;

- iv) location;
  - v) size of the population and ethnic groups directly involved;
- vi) educational components.

The choice of area by this criterion may be determined by the importance of the operation in terms of financial investment or expected revenue, by the success of the operation, or by the information it is likely to yield in regard to articulation of the related sectors with the basic education program etc.

#### c) Educational situation

This point has already been dealt with in chapter 4, where the usefulness of identifying existing activities and ascertaining regional disparities was stressed. As a result, the requisite information will be available to select a target area on the basis of:

- i) the volume of unsatisfied educational needs (regions with a low schooling rate, new educational needs resulting from a development operation, for example);
- ii) the existence of activities relevant for basic education, which deserve to be examined under new perspectives.

### 2. Identification of Target Groups

The potential beneficiaries of the basic education programs do not constitute a uniform mass. The use of certain criteria makes it possible to single out groups that it is particularly desirable to reach.

#### a) Age

The concern for effectiveness tends to lead to a preference for homogeneous age groups for which specific educational methods can be employed. But this may result in restricting participation to those age groups which will easily profit from the education provided and neglecting those considered less responsive to new ideas. Regarding the education of females, for

example, it might be more practical to concentrate on young girls who assimilate better than married women burdened with various duties.

#### b) Sex

Traditionally the two sexes are expected to perform different tasks, and this is reflected in their education. It may be advisable to respect this differentiation for a time or, in a perspective of development, to envisage a different distribution of duties. There are many examples where such an innovation has been achieved through the introduction of crop rotation or non-traditional activities as well as of cultivation methods previously unknown to the populace.

#### c) Productive activities

Although an effort must be made to provide all groups with a similar level of knowledge, the functional aspects of basic education will evidently vary according to whether it is destined for a population of fishermen, farmers, live-stock holders or craftsmen, since their interests are different.

#### d) Educational level

Any educational action will be more efficient if it caters for participants with an analogous level of education. The groups distinguished by age, sex and activity should, therefore, be large enough to allow for sub-groups to be formed, each of which consists of a sufficient number of participants of equal educational level to warrant its being given separate attention by the teacher.

#### CHAPTER 7

#### EDUCATIONAL NEEDS, CONTENT AND METHODS

Once the target areas and the target groups are identified, the various needs to be met by basic education can be specified (taking into account the strategic elements mentioned in chapter two), and the most suitable instructional contents and methods to satisfy these needs can then be defined. Adequate liaison with the traditional forms of education as well as sufficient flexibility to adapt to evolving situations seems essential. A crucial problem is that of the language of instruction.

### 1. Educational Objectives

Identification of educational needs is a condition *sine* qua non for the preparation of basic education programs, since they are intended to meet precisely these needs.

In a context of "absolute poverty", where the lack of resources will severely limit the educational minimum that can be provided, the idea expressed by Kenneth King is pertinent (1):

There is no need for a curriculum development centre and subject specialists to map out what people need to learn under such conditions. Their learning needs are quite fundamental:...

However, these fundamental needs have to be specified.

King, Kenneth. "Minimum Learning Needs for the Third World: Panacear or New Problems?" *Prospects*, Vol. 6, No. 1; 1976, p. 40.

Under the conditions prevailing in African countries, they may be grouped under the following categories (1):

- a) In the domain of health:
  - sufficient knowledge to solve their health problems themselves, i.e. to prevent and, in some cases treat illnesses;
  - the knowledge necessary to improve their nutritional habits and their adaptation to the environment.
- b) In the economic domain:
  - the knowledge and skills required to render their work more profitable through application of more efficient production methods;
  - the knowledge and skills required in the daily life of the various population groups (e.g. house construction and maintenance, repair of simple machines and tools, domestic skills, spinning, weaving, etc.).
- c) In the domain of socio-cultural life:
  - command of basic skills in the mother tongue (reading, writing, numeracy);
  - understanding of usages and customs governing the social life in the community;
  - sufficient understanding of national or local culture and religion to facilitate integration into the community.
- d) In the domain of civic life:
  - functional knowledge required to regulate their relations with the various administrative services;

Taken from R.P. Balenghien. Etude de cas au Mali. Bamako: DINAFLA, 1975.

- functional knowledge enabling them to fulfil their role as citizens and to participate actively in the life of the community.

### 2. Minimum Educational Needs

The specification of minimum educational needs within each of the above categories may vary considerably in different regions of the same country in terms of requirements of the population, the level of its aspirations, often linked with the cultural level, the position already attained on the one hand and the available resources on the other. It also varies with the target groups. In other words, except in the case of "absolute poverty", the definition of these needs is a delicate job and an opinion poll would seem to be most useful. (1) The people themselves should express their priority needs in the course of such an inquiry, and this can be quite naturally coupled with the evaluation of existing educational activities (see chap. 3).

It seems out of the question that basic education programs could provide this educational minimum with the resources normally available within the education sector. In the field of health, hygiene and nutrition as well as in that of agricultural production, to mention only two examples, the education specialists and the material are controlled by ministries other than that responsible for basic education. Basic education services should, therefore, not be considered self-sufficient. They should not try to do everything with inadequate resources but rather serve as stimulating and coordinating agents, so that all operations contributing to the provision of this minimum of education would be articulated to ensure a harmonious orientation of activities and to limit overlaps and gaps.

# Educational Themes (2)

All activities aiming to satisfy minimum educational needs must form a coherent whole. Thus, the texts used for teaching to read and write should not be chosen at random, but should contain a message in the form of observation, reflexion or ac-

Information on such a survey and the way of utilizing its results is given in a recent document by C. Bonnani. *Technical Papers on Non-Formal Education*. Paris: UNESCO, 1976.

<sup>&</sup>lt;sup>2</sup> (Please see next page.)

tion related to one of the other domains. Similarly arithmetical concepts should be taught by reference to concrete situations and the daily work of the people concerned. The surest way of maintaining the coherence and unity of basic education is to provide a thread common to all the domains touched. It would seem that in any given zone certain educational themes could serve as such a thread.

If liaison between basic education and development is considered necessary, the educational themes should reflect the concerns of the local development programs. In the Sahelian region, for instance, the major constraining factor is inadequate water supply. The solution of this problem conditions the solution of most other problems. It thus appears desirable that increased water supplies, and their better utilization for human and animal consumption and for irrigation, be the central concern of the various development sectors (nutrition, health, agriculture, animal husbandry, etc.) in this region.

### 4. Definition of Content

The content of the programs could be defined on the basis of the minimum educational needs listed above and the observations presented in the subsequent sections. One possible method would be to set up a working group for each of the domains involved (see Appendix II, sec. 3, para. e), and a synthesis group charged with ensuring coherence of the whole. The first, composed of specialists with very good knowledge of the country and the needs of the population in their respective domains, would be guided by the members of the permanent team who would supervise their adherence to the project's objectives.

Definition of the content might be linked with the training of personnel. Future instructors, assisted by the administration, could test provisional model lessons with representative target groups, and then help to finalize them in accordance with the results obtained.

The educational content could also be conceived in the

The few suggestions presented in this section are extensively discussed in an article by Jacques Bugnicourt "Pour l'aménagement des campagnes africaines une formation-action". *Tiers-Monde*, Vol. 14, No. 54, April-June 1973.

form of modules based on the educational needs of the different age groups (children, adolescents and adults) (1). In each domain, the type and amount of theoretical and practical knowledge considered useful for each of these age groups would be worked out. Taking into account the objectives of each educational program, a selection or combination of various modules would then be made available to the target groups according to their educational and developmental needs.

### 5. Educational Methods

The practical nature of the objectives of basic education necessitates the use of active methods. In this respect the sequence of the instructional process varies with the disciplines featured in the programs. In general, however, the following phases may be distinguished in the course of a lesson:

- a) Information proper, which the animateur or the teacher must present as precisely as possible, illustrating it with one or two concrete examples appropriate for the age and level of the participants;
- b) Discussion of this information, during which misunderstandings of the message will be corrected and the information adjusted to the level of each individual;
- c) Testing of individual assimilation by means of questioning or exercises whose successful completion depends upon the information that has been communicated.

In this connection, reference may be made to some recent publications by the UNESCO Division ED/EFD/Cooperation with UNICEF in the series "Notes, Comments...": No. 7: Alles, J. Learning in Childhood: What are the Basics?, January 1976; No. 8: Bonnani, C. Basic Learning Modules: Are they Feasible?, February 1976; No. 10: Alles, J. and Moulton, J. The Concept of Basic Services and the Learning Components within it - Selected Issues and Problems, July 1976.

However, the mode of communication chosen may alter the teacher-pupil relationship and create a special situation:

- a) Mass instruction, whether provided by radio broadcasts, written or printed documents or by other means, is useful for providing information. In that case, the teacher-pupil relationship is one-sided and characterized by the fact that the same information reaches many participants in different places at the same time.
- b) Group work permits more profound educational activity in the course of which the teacherparticipant relationship becomes reciprocal, facilitating discussion and an exchange of ideas.

Summarizing, the application of any particular educational method must be adapted to the modes of communication chosen, and these must take into account (particularly in the Sahel countries) the local situation in respect of buildings, socio-economic context, available instructional material and time schedules.

Other methods or lines of action could also be worked out in the course of local experimentation and through an exchange of information on similar educational activities launched in other localities, regions or countries.

# 6. Language of Instruction

Choosing the language of instruction is one of the fundamental problems of basic education in the Sahel countries. The use of French, the language of administration, seems out of the question if the intention is to provide a basic education as defined in chapter 1, i.e. an education reaching the major part of the population at low cost. In fact, the proportion of people able to speak and read French is very small, even in countries with relatively high schooling rates. Besides, one of the factors prolonging the period of primary schooling and increasing its cost is precisely the difficulty of learning French, a foreign language not spoken outside the school. It thus follows that if real basic education is to be provided, it must be in one of the national languages. Great attention must,

consequently, be paid to the linguistic situation in the countries concerned.

a) Linguistic situation in the Sahel countries (1)

Considering the number of languages spoken in the countries covered by this study, one might be tempted to think that in view of this linguistic complexity the idea of using national languages is unrealistic. In actual fact it will, however, be found that above this diversified linguistic sub-stratum there are in most countries a small number of languages used for communication by the majority of people, and that several of these languages are common to two or three neighbouring countries. Moreover, some of these languages are so dynamic that there is justification for saying the West African Sahel is moving towards a progressive linguistic unification around a few great languages of inter-African communication (Mandingue - Hausa -Arabic). Even now, using seven of these (Wolof, Mandingue, Peul, Maure, Songhay, Hausa, Arabic) would make it possible to cover virtually the entirety of populations, with each language capable of reaching some millions of people. An enormous amount of work remains to be done, however, before these languages can be used as languages of instruction.

b) Basic principle for a linguistic policy

Given the object of the present study, linguistic policy should be considered on the national and the international level.

i) For some ten years, some countries have pursued a policy of using a certain number of national languages in teaching adult literacy. In this connection they have undertaken a series of preliminary tasks, such as working out transcription systems and preparing syllabi, readers, dictionaries, texts for post-literacy students. All this constitutes an important fund for basic education. Nevertheless some problems are as yet unsolved:

This question is extensively dealt with in Mother Tonge Education. The West African Experience, edited by Ayo Bamgbose. London: Hodder and Stoughton; Paris: The Unesco Press, 1976.

- For many languages no official transcription system exists which would make it possible to use them as a means of access to written matter;
- Even in the case of written national languages, a great deal of practical research work and publication remains to be done.
- ii) One of the most important problems is to decide which languages to select as media for basic education. The experience made in this regard in Mali tends to show that, in the case of populations speaking national languages of restricted usage, it may be useful to proceed in two stages:
  - A first phase of literacy instruction in the mother tongue should facilitate access to written material (experience has shown that if the mother tongue is used, this progress can be achieved in 250 to 300 hours);
  - A second phase is advance to a more widely used national language as a medium of instruction for basic education. advance will be all the easier if the language is already being used for oral communication, which is very frequently the case. Even where people are strictly monolingual in a language of restricted usage, they exhibit a strong desire to have access to a language enabling them to communicate with the larger part of the country or even with several countries. This explains the progress of Arabic in Mauritania and Chad, of Wolof in Senegal, Bambara in Mali, Dioula in southern Upper Volta, Hausa in Niger and Sara in southern Chad.

The opportunity for every linguistic group, however small, to become literate in their own language will forestall the reactions they might show if they had the impression that the dominant ethnic group was trying to impose its language upon them. Further, it makes it possible to record in writing the

cultural and scientific heritage of the group concerned (one needs only think of the richness of African languages in regard to knowledge of the soil and of plants, including their medical properties).

It may be asked whether such an approach is realistic. The answer is that language teaching does not start from zero. In ethnic groups where Christian (Protestant or Catholic) missions are established, a certain amount of linguistic work has already been done for the purpose of evangelization, and this work may be used as a stepping stone. Similarly, in the ethnic groups where Islam has been established, systems of transcribing national languages into Arabic characters already exist.

- iii) As has been mentioned, a number of widely spoken languages are common to several countries (two, three or even more). This situation should lead to increased exchanges of linguistic efforts between countries, in terms of applied research or of joint publication of texts. For this purpose it may be useful to have a permanent structure for information and exchange.
  - c) Development of a linguistic infrastructure

The foregoing shows that it is not unrealistic to think that certain African languages could be utilized for basic education. However, the creation of a linguistic infrastructure demands:

- i) Preparatory work (transcription system, syllabi, graded dictionaries for diffusion, grammars, collections of texts), preferably to be carried out by national linguists having sufficient means at their disposal;
- ii) national language publications financed by a special fund at the national level or through inter-regional cooperation;
- iii) exchanges between countries in the sense described above.

The initial investments required may appear large. But as it is a matter of creating the linguistic infrastructure

needed for basic education, they may be considered indispensable.

# 7. Articulation with Traditional or Conventional Education

In view of an experimental approach and a desire to adapt to the environment, the traditional forms of education which have survived in essence, despite the introduction of western-type schools, should not be ignored. In the Sahel region, the two principal patterns are the system of oral tradition functioning in the larger part of the country through a network of animist societies, and the religious system represented by Koranic schools in the Islamic areas.

- a) Characteristics of traditional education
- i) Oral education provides knowledge relating to the problems encountered in real life. It occurs either in a natural and spontaneous fashion, in the shape of practical advice given in the mother tongue by those who have experience to those who have not, or in various forms within age groups, secret societies, etc. It is not limited to a definite period, but goes on, continuously or periodically, throughout the life of the individual. It permits acquisition of knowledge in the areas associated with the immediate interests of each individual in the framework of his habitual concerns, and ensures adhesion to the socio-cultural values of the community.
- ii) The Koranic schools provide, in a very unequal manner, literacy teaching in Arabic and instruction in the Islamic religion. In some cases, for instance in Mauritania, this system is relatively advanced. It also includes Mahadras (2) offering non-religious instruction at several levels.

Most of the information presented in this section is based on the unpublished paper by R.P. Balenghien which has already been mentioned.

<sup>&</sup>lt;sup>2</sup> (Please see next page.)

- b) Shortcomings of traditional education
- The incidence of endemic illnesses, high infant mortality and length of the average lifespan indicate the inadequacy of traditional education in the domain of health.
- ii) The stagnation or even regression of the living standard in certain regions and the subsistence, not to say bare survival economy in the rural areas show that in the present state of affairs, the knowledge transmitted is not a factor of progress and does not answer the requirements of a population explosion.
- iii) As, with the exception of the Koranic schools, the only mode of communication employed is by word of mouth, teaching lags behind modern cultural developments (radio, press, etc.). The result is loss of the cultural tradition and the heritage of past generations.
  - c) Traditional and basic education

While traditional education contains positive elements which should be utilized, the influence of the school, contacts with modern life and especially the massive diffusion of information through the radio considerably weaken its impact. Basic education could systematically correct, complement and update the knowledge acquired through oral tradition and adapt it to the present needs of the population.

Application of this principle is a delicate matter. It requires:

 i) sufficient knowledge of the objectives, the cost and other aspects of traditional education. (There seems to be a lack of research on this subject);

A *Mahadra* is an institution belonging to the original education system. In addition to Koranic studies, it provides a profane education that may extend to three levels: primary, secondary, and higher.

- ii) selection of themes from traditional education which are in accord with the objectives of basic education;
- iii) a method by which the message of traditional education is enhanced in value without being distorted.

Such an effort at integration would make the manifold messages addressed to the population coherent and would no doubt increase the effectiveness and augment the national character of the educational program. In Mali the literacy campaign was sometimes taken over by traditional educational structures, and this contributed largely to its success.

In the particular case of the Koranic schools' literacy programs in Arabic, their value varies according to the environment. They may be a very positive factor for basic education in a country where Arabic is widely spoken (particularly in Mauritania), but of little or no interest in a country where this language is not commonly used (for example Mali).

# 8. Necessity of Flexibility

One of the desired characteristics of basic education is flexibility in terms of objectives, organization, content, methods, timing, service modalities, personnel profile, etc. Flexibility is not an end in itself but a means of adapting the educational activities to requirements that vary with age, language, tradition, geographical features, mode of production, way of life, state of health, etc. Consequently, basic education should not be designed as a monolithic system but rather as a network of services, each endeavouring to satisfy a minimum of educational needs and each differing substantially from the others in its operational aspects.

This flexibility must be a permanent characteristic of basic education programs, since what is required is not merely to diversify education at a given moment, but to maintain the ability to meet new situations. It may well happen that, after a few years, the progress achieved or a better knowledge of causal connections make it necessary to replace the major theme (on which the sequence of education and thus the content had been based) by another, entailing a revision of the programs.

But is there not a contradiction between adaptation to varying situations and the existence of a certain number of norms valid at the national level? For example, would not the need to avoid excessive dispersion of resources and dissipation of efforts impose a limit on the diversification of educational materials? As a partial answer to this question, certain measures could be adopted, such as modular teaching, periodical assistance from specialists, selection of a limited number of national languages, concentration on certain types of development projects and improvement of selected aspects of living conditions. Nevertheless, the fact remains that diversification of the contents and modes of education will involve increased costs (see chap. 8, sec. 4, para. b).

Another hurdle concerns the teachers and the administrative personnel of basic education. It will be difficult to find teachers in the school system who are capable of adapting easily to a type of education closely linked with the environment, and who are ready to act as a driving force in the development of the community. Alternatively, people could be recruited from the community, who possess this capacity to adapt and are aware of their role as developers. But their prior educational qualification, if any, would be inadequate, and considerable costs would have to be incurred to provide it.

Clearly this notion of flexibility implies an inevitable compromise between what is desirable and what is feasible.

### CHAPTER 8

# RESOURCES REQUIRED

Any educational activity requires resources in terms of personnel and material. Their provision for basic education raises not only financial problems, but others as well. In this chapter an attempt will be made to outline these and to add some thoughts and suggestions.

# Personnel

The saying goes that the value of an institution depends on the people involved in it. This is particularly true of basic education. If it is to retain its characteristics, especially the flexibility necessary for it to function, it must rely heavily on people, on the members of the communities it serves and on the instructors and administrators.

Considering the demands made on the personnel (adequate command of a national language and of the technical aspects of various development sectors, ability to maintain contact with the community, pedagogical aptitude and competence, etc.), there is reason for concern about the possibility of recruiting suitable people and about the modalities of training them.

#### a) Instructors

There are two possible situations: the programmes either originate from an existing system, or they have been worked out on the basis of experiences that do not constitute a system. In the first case, the instructors may to some extent be recruited from the pre-existing system or from graduates of the system, and this offers certain advantages. This is broadly what is happening in Mali, where functional literacy centres

are the major source of recruitment, and in Mauritania, where the Mahadras serve that purpose. In the second case, the task is more difficult. The personnel must be found among the literate peasants, the rural animateurs (1), the agricultural extension workers if there are any, the officials allocated to the rural zones, etc. It is to be hoped that the educational effort made by these people will set the ball rolling, and that after a few years, basic education will be able to recruit personnel from its former participants. At any rate, the efforts at sensitization (see chap. 5) should bring latent teaching aptitudes to light.

The level of education will be one criterion for selection, but in view of the objectives pursued, sufficient knowledge of the community and acceptance by the community must also be taken into serious consideration. Short terms of general training, varying according to cognitive entry level and time available, should bring the selected personnel up to the required threshold. Subsequent participation in supervised periods of teaching practice will give them the opportunity of becoming acquainted with the material they will have to use. Brief periods of a few weeks, repeated during their service as the need arises, seem preferable to a long pre-service training which would cut off the future instructors from their communities and involve the risk of giving them pretensions to a different status (see sec. 4, para. c below). Under these conditions, the importance of an attentive and competent administration must not be overlooked, nor must the necessity of providing a sufficiently detailed instructor's manual.

To ensure the instructor's active participation in the common effort, their tasks should not be limited to those of operators. There should be direct and prolonged contact between the specialists and instructors at the time the program contents are developed, and the specialists should take the re-

The precise status and functions of an animateur vary slightly from country to country. In general, he has no formal qualification for teaching in the school system, but has received a short period of training in teaching related to a particular development program. In addition to such teaching, his functions include motivating and stimulating the local population to participate in development activities and to maintain the level of improvement achieved.

marks and reaction of the instructors into account (see chap. 7, sec. 4). Furthermore, the latter should receive special preparation enabling them to play the role of evaluator on their level (see chap. 4, sec. 6).

It is possible that the burdens involved may seem too heavy to some of those instructors who did not realize the full scope of their responsibilities when they accepted the job on a semi-voluntary basis. To prevent attempts on their part to dodge these burdens, several steps may be envisaged in addition to those concerning remuneration and status discussed in section 4, paragraph 3. For instance,

- i) Creation of a climate of understanding and close cooperation between instructors and administration;
- ii) Careful consideration of the instructors' reactions regarding questions of organization, content, methods and teaching materials;
- iii) Close attention to their further training and improvement by means of days or periods of information and theory and methods of teaching.

#### b) Administration

The organization, coordination, supervision and control of basic education programs represents a difficult case of educational administration. Continued training of instructors, the many difficulties inherent in the introduction of the programs, and the necessity of ensuring their satisfactory evaluation render the existence of a sufficiently large, motivated and competent staff absolutely indispensable. Selection of the responsible personnel is thus of prime importance. As long as basic education has not yet generated its own administrators, recourse will have to be taken to school-type teachers' aides or to educators who have undergone a particular type of training (Education Populaire, Youth Work and Sports, etc.). This necessity may actually have excellent effects on the integration of educational activities.

This personnel should be made aware of the importance of the task to be accomplished and should be fully informed of the modalities of the operation. Where the programs involve adolescents and adults, the staff members must be thoroughly acquainted with the specific aspects of education for these age groups. They must have a sense of responsibility and stimulation, since their job will not be to educate participants directly, but to play an active role in assisting the instructors (frequent visits, organization of study days, training periods, etc.). Owing to the initial low qualification, if any, of the instructors these will be exacting duties.

Recruitment on a voluntary basis seems necessary, as it will be difficult to impose new tasks on people who are used to doing their accustomed work in a well-established school system without having to make great efforts of imagination and initiative. Great care must be exercised to select people with an aptitude for innovation. It may be preferable to select young aides fresh from their initial training, without experience, but enthusiastic and open to new ideas, rather than older teachers who are experienced, but lack drive. In order to attract and keep especially suitable persons it may be useful to arrange that they receive benefits corresponding to their extra work and responsibility. The necessity of frequent transfers will also entail considerable expenditure (see sec. 4, para. 2.c below).

The human qualities indispensable for the exercise of their functions must be developed during information and training periods. Provided they have the necessary competence, their participation in the conception, planning and organization of the programs should be sought.

# 2. Instructional Materials

The program content having been defined (see chap. 7, sec. 4), it should then be translated into tools for instructors and participants: printed material, radio broadcasts, and various other materials. The use of several national languages as media of instruction will considerably complicate the work of those responsible for designing these instructional materials.

#### a) Printed aids

At least to start with, use will have to be made of printed aids employed by existing educational activities if an evaluation has confirmed their validity (see sec. 4, para. 3 below). This has been the case in Mali, for instance, with the material

for teaching functional literacy.

New printed material should be simple, illustrated with photographs or drawings. It should be so conceived as to match the characteristics of the target groups and also to facilitate periodical evaluation of the knowledge acquired.

Two types of printed material should be envisaged:

- Material for the instructor to serve him as an aide-memoire in his daily task. It should include everything he has to teach in the course of a lesson or a week, precise directives on the progress of the lessons and guidelines for evaluation of the results;
- ii) Material for the participants. These again may take two different forms:
  - single sheets to be distributed by the instructor every day at the beginning of each lesson to maintain the interest of the participants;
  - or booklets of a shape specially designed so that the participants can have them always with them.

In making a choice between these two alternatives, specific local conditions should be taken into account as each has its own disadvantages: sheets may be lost and are more easily damaged, while booklets and manuals could be difficult to keep under prevailing conditions.

In the preparation of this material some problems will be encountered, for it is often hard to find specialists capable of writing - in the various languages of instruction - sheets or booklets which possess the desired characteristics. The printing of this material within the scheduled time and in the desired form will no doubt present further difficulties. Even greater ones will arise finding suitable storage places and means of distribution (lack of communication facilities and inadequate transport). These practical aspects - the seriousness of which depends on the volume of material envisaged - call for special attention if the whole plan of implementing the pro-

programs is not to be endangered.

Like other components of the programs, this material should be evaluated in terms of the extent to which it meets the objectives pursued and the needs of the participants. Specific evaluation procedures should be envisaged taking into account the reactions and criticisms of the personnel involved, i.e. instructors, administrators and participants (see chap. 4).

#### b) Mass media

The use of mass media, such as radio, press, television (where it exists), may provide a considerable, sometimes even indispensable, support for the training and improvement of instructors, as well as for the educational activities themselves. In this context, educational radio programs deserve special mention because of their flexibility and their exceptionally wide diffusion. But in the face of the abundance of entertainment programs, only an overall policy will make it possible to secure sufficient broadcasting time for educational programs. If maximum benefit is to be derived from this medium, two points should have top priority: (1) availability of the studios of radio stations for the preparation of broadcasts designed for instructors or participants, and (2) adequate arrangements at the reception end to ensure that the broadcasts reach the audiences for which they are destined (receiver sets, organization of listening groups, etc.) and that the necessary feedback is obtained.

#### c) Other educational material

Several of the above considerations apply in essence to other educational materials, whether for collective (black-boards, chalk, compasses, etc.) or individual use (exercise books, pencils, slates, etc.).

# Infrastructure

Involvement of the community, which is to benefit from the basic education programs, in the creation of the necessary infrastructure is essential and not merely for financial reasons (see sec. 4, para.2.a below). It manifests the community's interest in the activity and entails a kind of responsibility for it. Besides, facilities largely constructed and equipped by the community will be easier to integrate with the environment.

# 4. Financing

One of the major advantages expected of basic education programs is that their costs will be in keeping with the economic situation of the country and will thus permit their more general implementation. If they were merely well-adapted to the environment but were as expensive as the existing educational system they would fail to attain one of their principal objectives. Thus, the following questions must be asked:

- i) Can basic education programs of reasonable cost be designed?
- ii) Can the cost of these programs be kept reasonable when they are extended to ever larger dimensions?

Before going into these questions, something should be said about the importance of low-cost education for the Sahel countries.

a) Schooling potential of the Sahel countries

The Sahel countries are poor, and the amount of gross domestic product per school-age child is low. If it is related to the cost of schooling one pupil for one year, a coefficient is obtained the evolution of which can be assessed overtime as a result of modifications of its components, or which can be compared with that of other countries at a given moment. In the latter case, it may serve as an instrument for measuring the relative capacity of a country to provide schooling for the school-age population, or briefly, the schooling potential of a country. In the absence of more recent data, reference is made here to the results of research on several countries done some ten years ago (1). This research shows that in the year 1965/66 the schooling of 26% of the children in Senegal, 12% in Mali, 10% in Niger and 7% in Mauritania required the same financial effort as that of 100% of the children in Gabon.

If similar calculations were made in 1976, they would re-

See Recherche sur les coûts de l'enseignement primaire à Madagascar et dans huit pays francophones d'Afrique. Vol.1: Présentation méthodologique. Etude comparative. Paris: SEDES, 1967.

veal a much wider gap. Owing mainly to petrol and mining exploitation, Gabon has experienced rapid development whereas the Sahel countries have suffered from several years of drought which have impoverished this essentially agricultural region. These figures evidence that the least favoured countries cannot rest content with the present types of conventional education but must investigate less expensive models that will enable them to envisage provision of education for the bulk of the school age population in the near future.

## b) Basic education at reasonable cost

To assess the feasibility of low cost basic education, each category of expense involved, i.e. investments, materials, remuneration of personnel, should be examined and measures that may reduce the costs be identified.

## i) Investments

These concern chiefly buildings and furniture. To the greatest possible extent, basic education should make use of existing facilities assigned to educational or cultural services in order to obtain a coefficient of maximum utilization. Where new buildings are required, recourse to the resources of the community or group for whom they are destined would considerably limit the expenditure. There is no need for these buildings to be constructed by techniques essentially different from those normally employed by the local population. Where possible. these customary techniques or the design of the buildings might be improved by introducing some innovations. Such improvements may be valuable as examples for further building within the community provided the expenses involved remain within its means. In some cases, the collective may require financial aid, especially if materials have to be bought (e.g. sheeting, cement, matting). But great prudence should be exercised in this respect to avoid alienating the basic education program from the environment.

### ii) Material

The educational activity can be made effective with a minimum of material, namely printed matter, radio broadcasts, individual (pencils, exercise books, etc.) and collective material (blackboard, chalk, etc.). The differentiation of content and methods will no doubt entail a costly diversification of these materials, but with an effort it should be possible to

reduce the unit costs. The very simple materials which cannot be made by the participants themselves could be produced by creating and developing local industries, so that the sums devoted to education would flow back to the creditors. The individual and collective material could be financed by the communities or families concerned, according to their capacity. This would be a means of getting the population used to incurring cultural expenses of a modern kind when their living standards improve, in particular as a result of the link between education and development. (In a traditional society a considerable part of its resources is devoted to this type of expenditure.) Any profit deriving from "school forms" in which agricultural skills are developed could be used for the same purpose; a significant example in this regard is Tanzania.

# iii) Remuneration of personnel

This is the major item of expenditure. The remuneration of personnel accounts for over 90% of the expenses involved in school education. The rigidity of public service rules makes it difficult to bring this remuneration down to a level which corresponds to the economic situation in the Sahel countries. where the average annual expenditure on primary school teachers' salaries represents ten to twenty times the per capita gross domestic product (1). This fact impedes the extension of the The result is an odd contradiction. school system. amounts of money are spent on educating young people who would be capable of contributing to the development of the various sectors, in particular education. Most of them, however, are condemned to unemployment because an obligation is felt to pay high salaries to the small minority actually employed - a manifest example of malthusianism, with grave consequences. one analyzes the intentions of those who initiated some profound reforms of the educational system in the French-speaking countries, one finds a persistent desire to change the public ser-

In the African countries formerly under French rule, the salaries of public servants are generally very high. This is especially incongruous in those countries where the per capita product is low, as is the case in the Sahel region. In certain countries, such as Mali, where the remuneration of efficials has been frozen for several years and where the peasants' incomes in the development zones have been rising, the gap is beginning to close.

vice regulations so as to give teachers a different status by making them employees of the community concerned (for example: the personnel of the rural education centres in Upper Volta during the initial phase; the teachers in the rural primary education experiment in Madagascar).

Though the administrative personnel for basic education programs will generally be paid by the state, the instructors' remuneration is to come largely from voluntary contributions, which explains its estimated modest cost (1). The experience already gained shows that this is possible under the following working conditions:

- The instructor should be chosen by and from the community, which appoints him to fulfil a community function. In return, it gives him a compensation in kind or in cash;
- He works on a part-time basis (two hours per day for six days per week) during part of the year, if the rhythm of the functional literacy program in Mali is accepted as a model for basic education. This enables him to continue his main occupation (agriculture, animal husbandry, fishing, crafts, etc.).

If it is necessary to involve more qualified personnel, specialists from other development sectors may be asked to participate in the basic education program. Such participation should, however, be included among the obligatory functions of these specialists and not left to their good graces. Actually, how can one be a sectional development specialist without instructing, training and educating people?

Devolvement of the obligation to remunerate the instructors upon the benefiting community or other development sectors is the method usually employed to reduce the expenditure on basic education personnel. However, the frequent necessity of granting special indemnities for compliance with administra-

It should, however, be noted that the teachers of the pilot Mahadras in Mauritania receive a state subsidy of UM 7,200 per trimester (\$ 144), in compensation for three additional hours of work daily.

tive requirements and for arranging transfers of personnel may out-balance this saving. In this case, an attempt to reduce costs by increasing the number of participants per instructor would hardly affect the situation. Theoretically, an instructor could take over two or three groups for ten to twelve hours each per week, but he would then be engaged in a full-time activity, and this would raise status issues. Besides, there is the problem of adolescents and young adults who are free only at certain times of the day. Nor is it possible to lay down strict norms concerning the number of pupils per instructor. If the needs of each particular environment are to be met, the numbers will differ widely from one place to another. Establishment of a new group may become necessary owing to the dispersal of a previous one, or to the inability of the initial instructor to cope with the task in the time he has available, or because he lacks the aptitude, or because of the size and demands of the group.

c) The problem of keeping costs within reasonable limits despite expansion of basic education activities

In principle, the multiplication of basic education centres should not increase the cost per pupil if each centre has been designed to function inexpensively. On the contrary, the production of a larger number of work sheet handouts and, more generally, of printed aids, should reduce their unit cost. But there is another aspect that must be taken into consideration. Expansion of basic education implies a substantial increase in the number of instructors. They may gradually become a pressure group whose influence will grow with the size of its membership. Very likely the instructors will tend to claim remuneration and career guarantees approximating those enjoyed by teachers in the formal system, for too many of them their volunteer work will be merely a means of getting into a full-time, and consequently paid, occupation.

Will the authorities be able to resist such pressure? The relative weight of personnel costs in educational expenditure is such that any substantial increase will restrict the possibility of extending the programs to wider sections of the population. Coexistence of two sub-systems, one nonformal, the other formal, would seem to justify the demands of the underprivileged staff. This is an additional argument in favour of harmonization of the system (see chap. 9, sec. 2, para. d). In any case, the fact that basic education instruc-

tors are mainly a responsibility of the community, that they engage in a part-time educational activity, that in general they do not have a professional level enabling them to get into the formal school system, should make it possible to keep their demands within bounds.

#### CHAPTER 9

# POST-BASIC EDUCATION ACTIVITIES AND THEIR ARTICULATION WITH OTHER EDUCATIONAL PROGRAMS

The acquisition of rudimentary knowledge cannot be regarded as the ultimate achievement in the life of an individual. Nor is it either possible or desirable to isolate basic education programs from other educational activities.

# 1. Post-Basic Education Activities

In order to avoid loss of acquired knowledge, to meet new needs and to ensure the training of rural development agents, educational activities should continue beyond basic education. The use of national languages in the public services would, besides, render the effort made to achieve literacy in these languages a profitable one.

a) Design and diffusion of post-literacy reading material

In view of the diversity of occupations followed by exparticipants, the question of reading material to keep them on their level of literacy raises many difficulties. Far from being able to suggest a simple solution, this study merely presents two current examples:

- i) In Tanzania, such material has been developed from traditional verbal tales and popular stories so that part of the oral cultural heritage, which was in danger of getting lost, has been saved (1).
- ii) In Mali, a rural monthly named Kibaru is published in the national language, Bambara, with the aid of UNESCO. This journal contains ar-

ticles of general information and devotes much space to photographs, news concerning the rural world and to letters from readers. Also published in this medium of communication for the Bambara-speaking population is information on educational experiences and on successful developments in the region or elsewhere, with descriptions of the means and methods used and the reasons for their success. All of these may provide a good stimulus (2).

## b) Use of radio

Radio broadcasts could also be utilized for improving the education of the newly literate, especially for the diffusion of scientific knowledge to target groups, such as farmers, fishermen, nomads, traders, etc. Similarly, educational radio programs could help to maintain knowledge already acquired, develop it and enrich the popular culture.

# c) Prospects of continued education

The satisfaction of their minimum educational needs, their confrontation with concrete problems of health, production, relationships, etc., will generate new needs and increased curiosity in the target groups (desire to enlarge the knowledge acquired, to tackle matters connected with those previously dealt with, etc.). In order not to risk frustrating the ex-participants, far-reaching post-basic education activities should be

See Simoni Malya, "Traditional Oral Literature for Post-literacy Reading Material", *Prospects*, Vol. 6, No. 1, 1976, pp. 98-102. Malya analyzes the procedure of collecting popular stories in the various national languages, their translation and reproduction in Swahili, and the problems encountered in the course of this long process, especially that of adapting this material to the needs and interests of the young and of adults.

See Bernard Dumont, "Functional Literacy in Mali: Training for Development", Educational Studies and Documents. Paris: UNESCO, No. 10, 1973, pp. 64-66.

envisaged from the start, either through access to the formal system (see 2.a below), or through the creation of nonformal socio-cultural activities. However, as the problem is to respond to spontaneous interests expressed by the different target groups, neither the substance nor the form of the answers to be given can be foreseen. All that can be done is to keep a reserve of people and material to meet this demand. The extent of such demand will be a measure of the degree to which basic education has fulfilled its role as an introductory phase to lifelong education.

# d) Establishment of educational channels for rural development agents

The training of young urban graduates for rural development work presents difficulties which the development organizations have tried to avoid by means of direct education of rural youth. By raising the average cultural level of the rural population, basic education activities would enlarge the choice of possible future agents. It would also be advisable not to confine the best of these to subordinate tasks but to afford them access to all those positions where knowledge of the environment constitutes a major condition for effectiveness in action. this particular case it seems preferable to establish special educational channels starting from the profile of basic education leavers rather than obliging these to go through a formal education, the content and methods of which would remove them from the conditions of rural life. A concrete, practical education eschewing all academic pretensions would enable the animateurs, agricultural extension workers, nurses, etc., to be directly prepared for the tasks necessary for the progress of the rural world until such time as the school system will have been reformed.

# c) Use of national languages by the public services

For the population, their relations with the public services are of prime importance. Regarding any matters outside the community, the administration seems all-powerful, and basic education would be of limited value if it did not result in facilitating contacts with the authorities. Certain functional aspects must, therefore, be directly linked with this concern. The chief problem is the language of communication. In Mali, for example, where French is used by the public services, an effort to achieve literacy in Bambara appears to be of little help in this respect. The authorities are well aware of the

situation and are seeking to remedy it by means of seminars in which the officials (at least those who have constant contact with the Bambara population) are encouraged to use that language. In particular, they are initiated into a transcription system conceived to facilitate that change. This example might be followed by other countries. Although there can be no question of the administration using all the languages in which "first-level literacy" is taught, a limited number of widely spoken languages could be agreed upon. No doubt this would make for better integration of the public services into the life of the community, and consequently for greater efficiency of the educational programs.

# 2. Articulation with Other Educational Activities

The importance of a linkage, or even integration, of basic education programs with development operations for increasing the external effectiveness of these programs has been emphasized earlier (see chap. 2, sec. 1, para. c). Their internal effectiveness will also be increased by sufficient coordination between basic education and all other educational services. All too often, educational activities are divided into sub-systems under various ministries or services, each having specific personnel and facilities for its exclusive use, and responsibility for particular areas. This situation is incompatible with a global conception of development where education is considered as part of the whole, and where its effectiveness cannot be measured by the criteria selected by the sub-system but only by the results obtained in promoting the general welfare of the population.

To achieve this end, the spirit of competition must give way to that of cooperation, with implications especially for the following:

- a) Coherence of the educational system,
- b) Utilization of available resources,
- c) Modalities of organization, and
- d) Establishment of a reformed educational system.

Though articulation of educational activities is required both on the national and local level, the main stress in this

study is placed on the problems arising at the local level, because basic education has the best chance of being effective when it forms part of the integrated development operations in a given region.

## a) Coherence of the educational system

This coherence must be reflected in the conception of the system as well as in its objectives, contents and methods. The education system should not consist of separate elements simply running alongside each other. It should be conceived as a harmonious whole, the elements of which are vertically and horizontally articulated, without overlaps or gaps. It should thus enable all age groups to acquire the fundamental knowledge and skills indispensable for individual development and prosperity of the community. Clearly such a fully articulated system cannot be created overnight, but every new activity should find a place in it.

In such a framework, the position of vocational education in relation to general school-type education merits special attention. The former should be built on the latter by stages, and it should start from the level of knowledge already attained. Transition from one educational activity to the other would be facilitated by the fact that the contents and methods of both are inspired by principles deriving from a common desire to meet development needs (educational themes based on development concerns). Moreover, the intention to provide a concrete education, to enable the young to cope with real life situations, should permeate all parts of the system and so ensure its external productivity.

In this overall system, basic education programs should occupy a very special place. Running parallel to school education and benefiting all sections of the population that have had no schooling, they would also be the starting point for lifelong education of a cultural-productive nature satisfying the population's desire for learning. Like any other educational activity, basic education must not be conceived or considered as the end of a road. This applies especially to school age children, who must have opportunities of subsequent access to more advanced levels of education, particularly through the establishment of specific channels for the preparation of rural development workers, as has been stated earlier.

## b) Utilization of available resources

In view of the large volume of educational needs to be satisfied and of the limited resources available, optimum utilization of these resources is essential. This means, among other things:

- i) An effort at full employment of personnel, with systematic recourse to the most competent specialists available for teaching a given subject;
- ii) An effort to make full use of existing institutions, such as teacher training establishments, which could serve to train personnel and work out the programs and methods of various educational activities;
- iii) An effort at full use of equipment, with systematic employment of the material best suited to a given subject. This is particulary desirable in the case of expensive equipment, such as large audiovisual aids, laboratories and workshops;
  - iv) An effort at full use of buildings;
    - v) An effort to change the criteria and practices applied to staff expenditure.

All these efforts would benefit the totality of educational activities in a region, irrespective of the authority responsible for any particular personnel, equipment or building.

This is possible only where in a given area the educational activities are articulated or closely coordinated. In the first case, the personnel, equipment, buildings necessary for attaining the overall educational objectives should be placed at the disposal of the authority in sole charge of education in that area. In the second case, these resources should continue to be allocated to a specific activity, but under certain conditions, others should be allowed to use them. This would interfere less with existing arrangements; however, exclusive ownership would remain an obstacle to really full use of the materials. Which of the two methods is to be adopted should be decided in the light of the given circumstances of time and place. One strategy may be to ensure first a better utilization of resources through coordination, and then try out a more far-reach-

ing integration, if the people concerned are mentally prepared for it. With regard to immovable facilities, they should be located where they will be easily accessible.

This common use of materials is particularly important for basic education, which can expand only if it is inexpensive both in operation and in investments required.

The principal obstacle on the way to achieving optimal utilization of resources will probably be the current criteria and practices regarding staff expenditure. Experience has shown that schools may be constructed by local communities and that the expenditure on individual, and even on collective learning aids, may be borne either by the community or by the pupils' parents. Efforts to reduce the cost of teachers have, however, had very little success. While a certain reduction of the effective cost does occur when a depreciation of money is not accompanied by a rise in remuneration (as is the case in Mali), this eventually creates a conflict situation. One radical solution would be to make the remuneration of newly-recruited teaching personnel compatible with the economic level of the country or recruitment area concerned (for example, a remuneration equivalent to two to five times the per capita gross domestic product would permit multiplying the available personnel by four on an average, at identical expense). To be equitable, this step should be subject to two conditions:

- i) The adaptation of salaries should not be limited to teaching personnel but should be extended to all public service staff (especially Health and Agriculture) on an equal or lower level than that of primary school personnel;
- ii) Existing personnel at the levels that will be affected by this adaptation should continue to be paid on the old scale. But those who have the necessary competence and dynamism should take on positions in teacher training or administration. The remainder will, on retirement or resignation, be replaced by teachers recruited on the new scale.

It may be difficult to gain acceptance of such a step, but it is a real political option. By making it possible to recruit a larger number of educated young people, it would have a favourable effect on "intellectual" unemployment. It would

also be a necessary, if not sufficient, condition for extension of the educational system and for the progress of various development sectors. It is no coincidence that those countries in which schooling is made generally available without educational expenditure stifling the other sectors, are also the countries where the average remuneration of teachers approximates the mean income of the population.

In any case, educational authorities do not have the power to take such measures. They could, however, introduce some basic changes which might facilitate the decisions described above. Possible lines of action open to them are:

- Reduction of the total duration of studies (particularly as a result of learning the basic material in the mother tongue);
- ii) Reduction of the number of hours per week (by means of revising contents and methods);
- iii) Use of part-time teacher-peasants paid for by the communities concerned;
  - iv) Transfer of the responsibility for payment of teachers to the communities or groups concerned.

It may be added that a growth of general prosperity, in particular of peasant incomes, as a result of development operations would diminish the relative cost of teaching personnel. But this evolution will take some time. In the meanwhile, new solutions must be sought to make the cost of school teaching more compatible with the available resources.

# c) Modalities of organization

The principle of coordination or articulation and the modalities of its general application should be defined at the level of central administration, but the adaptation of these modalities to local conditions would require frequent adjustments of detail. A certain amount of decentralization is always necessary.

At the national level, the problems to be discussed concern educational policy. Some countries have established education committees to define policy and watch over its implementation. The membership of these committees consists of the

heads of ministerial departments and of public and private organizations involved in educational activities. Sometimes the field covered by these committees extends to employment problems and the labour market; they are then in fact human resources committees. Too often these committees meet only when development plans are being worked out, to give orientation for action and define the volume of investment required. What is needed for the actual implementation of a policy is, however, permanent committees to ensure control and adjustment of the planned operations. Where an organization of this kind does not exist when the basic education programs are drawn up, the Interministerial Committee suggested (see Appendix II, section 2, paragraph c) might have its function extended, once the decisions concerning basic education have been made, to cover the entirety of educational activities.

At the local level, one authority might be designated to be responsible for the educational activities of an entire area, whatever the form of these activities (basic education, general education, technical training, etc.). It would have to ensure the coherence of the system and provide appropriate guidance. With regard to the utilization of available resources, there are two possibilities. In the case of real articulation, this authority would be in charge of all materials and distribute them according to the evolving needs of each activity. In the case of simple coordination, it would endeavour to reconcile the available materials with the needs.

Whichever possibility is adopted, it would be useful to set up in an area in which a rural development effort is being made an education committee in which the leaders of all education activities are represented. It would be led by the person responsible for the education sector in the region and would permit unification of the efforts of all those in charge of an activity. This Committee would have to be familiar with all questions relating to the linkage between education and development and know how to integrate or coordinate educational activities. Decisions would be taken, after consultation with the Committee, by the person in charge of education within the framework of his competences, and he would be by right a member of the Regional Development Commission.

Other modalities to ensure the necessary liaison can be envisaged. The essential point is to avoid, on the one hand excessive and paralyzing heaviness, and on the other hand lack of a structure, which would leave this liaison to the good will

of those in charge. Depending on the conditions in the country concerned, various forms of organization could be adopted and prove satisfactory in use; the scheme presented above is but one example of possible organization.

## d) Establishment of a reformed education system

The purpose of basic education programs, especially in rural areas, is to remedy an intolerable dichotomy: the side by side existence of areas (generally urban) where the majority of people are schooled, and other areas (generally rural) where schooling capacity is very limited. Furthermore, the rural-urban dichotomy may create yet another dichotomy in that basic education programs do not ordinarily provide access to careers in the modern sector, although the majority of pupils are recruited from rural areas. This is perhaps a lesser evil, but it would be regrettable if the situation were perpetuated. The basic education programs would then furnish an excuse for not reducing this new disparity, and the privileges enjoyed by the town dwellers would become stabilized (1).

It should not be thought that nonformal programs and the school system are two fundamentally different services, that the first will always be free from the defects of the other, and that the advantages of the second will never penetrate into the During the process of expansion, the programs (informal to start with) will tend to become institutionalized and, as a result, lose their flexibility and their inexpensiveness. The school, for its part, is not destined to remain fixed in its present form. Efforts to make it more flexible, more pertinent, more effective, may render it both better adapted to its tasks and less costly. It is, then, to be hoped that the nonformal basic education programs will influence the formal system when they have produced satisfactory solutions. An effect of this kind has been observed in Tanzania, where several features of the nonformal activities have been adopted by primary schooling (activities outside the school, emphasis on immediate usefulness of the knowledge transmitted, attempts at autonomy of educa-

With regard to these points, reference may be made to the opening address given by the Director General of UNESCO at the Regional Conference of Ministers of Education held in Lagos from 27 January to 4 February 1976.

tional institutions, etc.). This development has not been the result of a conscious strategy but rather of the evident coherence of nonformal activities with Tanzanian reality and the weight of these activities within the education system. Owing to the massive growth of their coverage, they have lost any marginal character; they can no longer be ignored (1). It is clear that if this influence is systematically sought, positive results can be more rapidly obtained.

The distinction between formal and nonformal would then be of merely conceptual interest; it would answer simple practical needs in the framework of a general strategy aiming to establish an articulated basic education system which would be truly democratic. It would meet the demands of an authentic and endogenous development (2).

See Gillette, A.L., Beyond the Non-Formal Fashion: Towards Educational Revolution in Tanzania. Amherst, University of Massachusetts, School of Education Center for International Education, May 1976.

On this last point, see the final declaration of the Conference of Lagos cited above.

#### FINAL REMARKS

In conclusion it may be useful to review some aspects of this report.

- 1. The decision to situate basic education programs in rural environments is a very deliberate one. It is based on the following facts. In the Sahel countries the vast majority of the population is rural, it has little opportunity of profiting from formal educational activities, the level of education must be raised to enable the people to generate their own development and participate in it with greater efficiency.
- 2. If basic education is to meet successfully the minimum educational needs of the population, it cannot be the responsibility of a single isolated organization. It must be a common task of all sectors involved in the development of the community concerned. Good coordination, still better, integration of the activities of these different sectors is a precondition for its success.
- 3. In a domain as vast and fundamental as that dealt with in the present report, there can be no stereotyped solutions which would be certain to achieve the objectives pursued, and to do so in a limited time. Modifying the behaviour of people is a long-term job. The first aim is to start reducing the educational and developmental inequalities suffered by the rural world, in the hope that a favourable process will emerge. It must be realized that such a result can only be obtained through persevering action.
- 4. The present report is but an attempt to provide a methodical approach and a framework for thought. It should be corrected and enriched by reference to concrete situations through further work of elaborating and trying out basic education programs.
- 5. Finally, the introduction of a basic education program

should be decided within the context of the entire education system. It should include an effort, rarely seen up to now, to evaluate all existing educational activities; it should be designed as a remedy against the various constraints under which the present formal system is operating; and it should serve to guide reform of the educational system, both in regard to diffusion of the educational minimum and to the establishment of a system of lifelong education.

#### APPENDIX I

# EXPERIMENTAL BASIC EDUCATION ACTIVITIES IN MALI AND MAURITANIA

#### A. MALI

# 1. <u>Historical Outline</u>

A Unesco report published in  $1972^{\left(1\right)}$  pointed out the deadlock in which the Mali school system found itself, in the following words:

"Education already consumes 30% of the national budget to school 20% of the children ... If the proposals made in the plan are carried out, they would absorb between 40 and 50% of the national budget in 1981 to school 28% of the children and produce a number of graduate secondary and higher education teachers which would in all probability greatly exceed requirements."

The report therefore recommended that "other solutions should be studied", with special consideration given to the results already obtained by functional literacy programs. This recommendation was followed at the time the project was prepared. It became a "basic education project" with the following objective:

"... to assist the public authorities in Mali in the research and implementation of new systems permitting a larger part of the population to be provided with some kind of basic education."

A Unesco consultant was placed at the disposal of the government in June, 1974 to define in greater detail both the objectives and the working methods (see below). The project was to start in the field on 1 May, 1975, with the arrival of the permanent coordinator.

Mali - Education et Développement, Analyse, Perspectives et Recommendations, EFM/48. Paris: UNESCO, April 1972.

 Main Lines of Research and Methodology: The Starting Hypotheses

The June 1974 report proposed the following main lines of research:

 a) Study of the problems inherent in the present system of "fundamental education" (1) in Mali, and proposal for its adaptation to the needs of the country;

Within this framework, the following specific problems should be given special attention:

- use of national languages in school,
- introduction of environment study,
- introduction of productive activities at school,
- technological education,
- training of a new type of teacher.
- Education of non-schooled rural adolescents, in particular investigation of the possibility of providing them, as a follow-up to literacy instruction, with both vocational and general education (especially education in basic science);
- c) Education of adults, especially through extension of the work already done by the functional literacy programs;
- d) Education of females of different age groups (girls in school, non-school adolescents, married women);
- e) Linguistic research necessary for the use of a national language as the language of instruction;

Since the 1962 reform, Mali has established a system of "fundamental" education of 9 years duration, comprising a first cycle of 6 years and a second cycle of 3 years.

f) Synthesis of all data collected in each region, in order to propose regional educational strategies to the government.

The methodology to be employed may be summarized as follows:

- a) Establishment of an interdisciplinary national research team (educationists, sociologists, linguists, economists), into which the project coordinator would be integrated;
- b) Compilation of a dossier for each of the abovementioned main research lines by this team, starting systematically with an inventory of existing activities in the country concerned, and a thorough evaluation of these activities in order to discover the reasons for their success or failure and the conditions for broader coverage;
- c) Presentation of these dossiers consisting of an "analysis" and a "recommendations" part to ad hoc working groups for their comments and modifications;
- d) Drawing up of an interim synthesis report for submission to a special interministerial committee (one year after the launching of the project);
- e) Finally, realization of a number of concrete experiments undertaken with the approval of the government.

# 3. Results Obtained: A First Appraisal

When the project was launched on 1 May, 1975, the team consisted, as had been suggested, of four researchers (an educational psychologist, a sociologist, a linguist and the coordinator). For carrying out the inquiries and writing monographs, the team enlisted the help of students; in particular twenty educational psychology students of the *Ecole Normale Supérieure*, with whom research contracts of limited duration were concluded.

## a) Fundamental education

The most interesting experiments (ruralized schools; curriculum focus on the environment were evaluated in depth. The evaluation of the successes achieved by certain ruralized schools has shown the possibility of orienting the reform towards a new type of school adopting a radically different instructional approach: starting with an exploration of reality (study of the environment), it would then furnish the explanations necessary for comprehension of the phenomena observed and finally guide the pupils toward action in transforming the environment (agriculture, animal husbandry, technologies, etc.).

In the course of a seminar on ruralization held from 26 to 29 December 1976, three committees were set up. They successively dealt with:

- i) The strategy of ruralization. Emphasis was laid on the necessity of linking "study of the environment" with "ruralization". The committee recommended:
  - a sensitization campaign at the national level,
  - introduction of environmental study in all schools.
  - establishment of "ruralization committees" at all levels.
- ii) Teacher training. The committee recommended:
  - transfer of all teacher training centres (IPEG) to rural locations;
  - modification of theoretical and methodological aspects of the training through constant linkage of theoretical knowledge with its practical verification, and through orientation towards study of the environment and the possibilities of transforming it;
  - integration into educational programs of a certain number of practical training periods in organizations participating in development;

- training of students in writing in the national languages.
- iii) The pedagogy of ruralization. The following points were stressed:
  - application of programs that are already largely ruralized, with adoption of a new methodological approach;
  - modification of the school calendar to make it coincide with the agricultural calendar;
  - basic agricultural training for teachers and pupils;
  - orientation of the present examination structure towards comprehension and transformation of the environment.
  - b) Education of rural adolescents and adults

In essence, the work carried out in this area consisted of a first phase of exhaustive evaluation of the results obtained by functional literacy instruction in those regions of the country where it achieved the best results. This evaluation, on which a detailed report (1) was issued, revealed several important facts concerning the possibilities of designing more suitable educational programs capable of covering the totality of the population at minimum cost.

Another phase of the evaluation had the following objectives:

 To assist Operation Groundnut and Food Cultivation (OACV) in establishing a permanent system of curriculum development and evaluation of literacy activities fully integrated with all OACV activities:

Interim Report on the Evaluation of Functional Literacy Instruction in OACV. July 1976. 50 p. and annexes.

ii) To carry out, in a sample of centres, a more intensive investigation of problems identified by the first evaluation, but which lacked a precise analysis.

The evaluation results provide evidence of:

- i) The interest of rural youth in acquiring literacy (80% of participants are below 25 years of age);
- ii) The possibility of achieving an adequate mastery of reading, writing and arithmetic in the mother tongue within three years of work during a limited number of hours per week (5-10 hours) and weeks per year (15-20 weeks);
- iii) The escalating effect of the first results achieved (e.g. good results achieved by a literacy centre have in almost every case led to the establishment of new centres, usually for younger age groups);
  - iv) The possibilities of self-financing. This has actually been done by certain villages, either through common cultivation of a "literacy farm", or through the intermediary of "traditional culture associations";
  - v) The feasibility of handing over certain responsibilities (commercialization, supplies and credit, management, agricultural extension work, etc.) to peasants who have become literate, and the impact of such transfers on the villages or groups of villages who have agreed to participate in literacy programs.

All this indicates that a follow-up to literacy programs in national languages - considered as a starting point and not as an end in itself - opens up exciting possibilities for new forms of education which are better suited, less costly and thus easier to implement on a national basis.

It is, therefore, in this direction that the team intends to guide the pilot projects envisaged in the second phase. The proposal is to undertake an experiment with some groups of newly literate rural youth (which can be identified through the evaluation report) in order to see what type of general and vocational education can be given to them without their having to leave their villages or abandon their usual activities.

As regards adults, it has been proposed to provide those who have already achieved literacy with complementary education in the form of training courses, which will enable them to take over certain responsibilities now carried by the Development Operation.

#### c) Education of females

Although research in this area started relatively late due to a lack of researchers, it is now well advanced. A working group led by the director of women's programs in the Literacy Directorate has been established. In this field also, the help of male and female students has been enlisted for conducting inquiries and producing area monographs.

Of the 28 monographs envisaged, 27 have been completed. They provide basic information supplementing the existing documentation. Five sub groups were set up to process the data thus collected and propose "partial syntheses". These were then presented and discussed at a study meeting held on 20 February 1977.

Reports are now available on:

- i) literacy centres for females,
- ii) social centres and private initiatives,
- iii) community development centres,
  - iv) mixed rural development centres,
    - v) rural maternity hospitals and activities for the protection of mothers and infants.

On the basis of these partial syntheses, an overall synthesis report is going to be drawn up by a small editing committee.

 d) Studies and activities concerning applied linguistic research

A new fact in this domain is that the linguistic section of the Applied Linguistic Research Division has taken charge of the entirety of linguistic research; in particular of objectives and methodology of the linguistic research program to be undertaken within the framework of the basic education project.

The following working groups have been set up and meet regularly once a week:

- i) a Bambara group working on the problem of phonetic notation and the problems of word formation (neologisms),
- ii) a Peul group, one of the main objectives of which is the preparation of a basic dictionary,
- iii) a Soninké group, which has completed its work on a transcription system and is finalizing a dictionary;
  - iv) a Dogon group attempting to devise a standard Dogon which could be used by the speakers of all six Dogon dialects,
    - v) a Songhay group, which on the basis of work already done in Niger, is preparing a transcription system and a basic dictionary of the two Songhay dialects (Gao and Tombouctu),
  - vi) a Tamasheq group doing the same work for Tamasheq.

For certain languages, no working group has yet been set up. The main ones are Khassonké, Maure, Boré (the language of the Bwa, usually called Bobo), Minyanka and Senaufo. These groups will be established when linguists with these languages as mother tongue become available. A notable fact is the intention not to leave out any of the languages spoken in Mali, and to accord each of them the status of an official written language which can at the same time be used as the language for preserving the cultural and scientific heritage and as the

medium of education.

The activities of the linguistic section are, however, not limited to a static study of languages; it has also begun to study their dynamism in the country's interior, focussing its research on bi- or multi-lingual situations and their evolution.

It is imperative that all this work should be accomplished if the implementation of the "new educational programs" (once these have been defined) is not to be considerably delayed in some parts of the country because of the absence of a basic linguistic infrastructure.

Another important activity of the linguistic section consists in initiating the teaching personnel into mastery of writing their own languages. In this respect the national language seminars organized by DINAFLA are a significant development. The following courses have already been conducted or are programed for:

- i) The higher grade of OACV personnel (Operation Groundnut and Food Cultivation),
- ii) The teachers in IPEG (Teacher Training Centres),
- iii) The personnel of IPN (National Institute for Teacher Education),
  - iv) The national personnel of the Ministry of Youth, Sports and Culture.

Finally, the linguistic section also has to promote the publication of both old and new texts in the national languages. To this end, an exchange of information has been initiated with the "Team for Linguistic and Literacy Research in the Sudan and West Sahel" of the National Centre of Scientific Research in Paris. Another activity in this field has been the drafting of a note proposing the creation of a "special fund for national language publication" and defining the practical modalities of its operation.

# e) Regional educational strategies

The first report on the methodology to be employed in the basic education project argued the necessity of a regional

approach in the following words:

A regional approach to educational problems is essential for the following reasons:

- There are significant differences between introducing school programs and introducing out-ofschool educational activities;
- ii) A study of the linkage of education with transformation of the environment can only be made at the regional level because of the differences in ecology and development potential;
- iii) Due to the considerable differences between the existing development structures (agricultural and industrial), the establishment of close interrelations between educational services and development potential (at which the project aims) can be attempted only at the regional level;
  - iv) Linguistic problems are specific to each region and cannot be concretely studied except at that level (varying degrees of linguistic homogeneity or heterogeneity).

When the Project was launched it was decided to select, for the time being, one region for which a methodology would be designed that could later be extrapolated for other regions. The region chosen was Mopti because it is characterized by extreme diversity in <code>geographical</code> terms (central Niger delta, Dogon plateau, Seno-Mango plain), in <code>economic</code> terms, with four large-scale operations in progress (two agricultural, one fishing and one livestock raising operations), and in <code>linguistic</code> terms, since this Fifth Region is the zone of confluence of the three major Malian languages (<code>Bambara</code>, <code>Peul</code>, <code>Songhay</code>), which are often superimposed on less widely spoken languages.

At the second stage, this work was to be extended with the aid of a research specialist from the Sixth Region who would join the DRLP.

# 4. Prospects for the Future

After two years of work in the field and processing of

data, it has already been possible to submit to the government proposals bearing on a number of important points without waiting for the complete synthesis report. Several meetings were held in September 1976 to discuss these proposals and to arrive at agreements necessary for the pilot projects which, it should be stressed, will be carried out by the services concerned with the support of the working group and not directly by the team itself.

Moreover, this team has just been considerably strengthened by the inclusion of ten new researchers (several of whom, already in service, have themselves asked for this transfer). This will enhance the team's working capacity, both in regard to evaluation of all innovative educational activities and in regard to support of experimentation with new programs.

# Conclusions

Though it is, of course, not yet possible to say precisely what in-depth modifications will result from this research and these activities, certain positive aspects can already be recognized:

- a) The existence of an *autonomous interdisciplinary* team solely concerned with research and reflexion is important. Too often, this kind of work is entrusted to committees whose members all have other commitments.
- b) The methodology used, i.e. starting from an analysis of innovative practices existing in the country and using final-year students for research tasks, has produced good results.
- c) One important indirect outcome of the project is the field experience it has given to the national researchers. This is an aspect which might well be systematized in future by envisaging specific training courses for research personnel in which research already done will be utilized and future research prepared.
- d) It may already be said that the basis education project has contributed widely to drawing attention to many innovative practices that were

little known before. It has validated the idea that, with creative efforts, schemes can be devised which are better adapted, less costly and easier to institutionalize than the present school system.

#### B. MAURITANIA

# 1. Historical Outline

A Unesco report published in  $1972^{(1)}$  showed the inability of the Mauritanian school system to meet the government's expectations:

- a) Public schooling, which absorbs 22% of the national budget, services only 19% of the primary school age population;
- b) The content of primary or elementary education is not adjusted to the culture, living conditions (especially the nomadic life of 70% of the population) or the development needs.

Since half-way measures cannot improve this situation, even in the long term, it was recommended to envisage a thorough reform of elementary education through simultaneous utilization of the widely diffused, traditional Koranic education and of educational broadcasting. Some attempts have, in fact, shown that the traditional education, unchanged for centuries, is capable of integrating innovations. Subsequently, the "Experimental Study of Koranic Schools" constituted one of the elements of the First Education Project of the World Bank in Mauritania.

In 1974 the coordinator of the project was placed at the disposal of the government to define in detail both the objectives and the working methods. The project was to be launched

Mauritania - Education, Développement, Analyse, Perspectives et Recommendation EFM/52. Paris: UNESCO, December 1972.

in the field immediately after the report of the preliminary mission was completed at the end of 1974.

# Objectives

## a) Initial objectives

The problem was to fit traditional education, which is perfectly adapted to the environment and widely diffused, into a modernization process, in respect of its content (literacy instruction in modern Arabic, practical calculations, useful knowledge) as well as of the educational methods employed.

To achieve this result, the study was set the following specific objectives:

- To measure the level of literacy in Arabic (reading and writing) and numeracy currently attained by children in Koranic schools and to determine, by means of experiments, the level of functional literacy which could be attained with additional low-cost educational material, radio broadcasts designed for students and teachers, and supervision by educational counsellors (Arabic-speaking Moslems);
- ii) To evaluate the improvements these additional means, i.e. supervision, texts and broadcasts, will produce in the performance of adolescents and adults attending Koranic schools;
- iii) To make cost benefit analyses of the three levels of Koranic schools in which these new methods have been introduced;
  - iv) To submit recommendations to the government concerning the policy to be adopted at these schools.
  - b) New definition of objectives

The objectives of the Koranic or "Original" school reform coincide with those of the general educational reform: to lay the foundations of a Mauritanian society firmly rooted in its original culture but open to the modern world and capable

of acquiring pro-technical attitudes. The supplementary content added to the original Koranic education is intended to prepare both youth and adults for active life in their rural or urban environment.

c) Awareness of the religious dimensions of the project

In view of the shortcomings of the educational system and its incompatibility with the needs of the country, it is hoped that the proposed Project, if it succeeds in achieving the desired transformation, could reconcile the "original" education with modern education. In the course of designing the programs it was, therefore, decided to prepare a religious program which would respond to the problems of the young at the time they change from traditional to modern mentality, and to include the religious dimension in all educational programs.

## 3. Administration

#### a) Central staff

This consists of a part-time director and a coordinator assisted by an administrative team composed of a head of the Mahadras services (school maps, religious education, etc.), an educational secretary (secretariat, information, translation, accounts, etc.) and a national education counsellor (initial and in-service training of administrative and executive personnel).

## b) Decentralized staff

It consists of provincial educational counsellors (administration of pilot Mahadras, preparation of regional training courses, preparation of program extension) and educators in the field, directors of Mahadras and pupil-teachers receiving constant educational assistance (one month's initial training, visits by the central administration, regional in-service training courses, teachers' guidebook).

# 4. The Educational Project

a) Study of the environment

Environmental study has a two-fold aim:

- i) Better understanding of the "original", i.e. the Koranic school, which includes a first cycle of instruction in the Koran and also a secondary and a higher cycle;
- ii) Better understanding of the traditional environment of which the Koranic school considers itself the guardian in the religious and cultural context, in order to guide traditional man towards an open attitude to modern life.
  - b) Psychological preparation activities

Before the Educational Project was launched, psychological preparation of administrative authorities, party organizations, directors of Mahadras and pupils' parents was undertaken in connection with the environment study in order to forestall rejection by the traditional society. It is now intended to do the same with teachers, so as to avoid a dichotomy and to pave the way for a receptive attitude toward official education from the outset. This now happens automatically because, in the first stage of the project, the Regional Education Directorates are requested to assist in the educational training of pupilteachers in the experimental classes. This psychological preparation is carried out simultaneously with the environment study.

c) Target areas for experimentation

At present, only 25 Mahadras are involved:

- 2 in the Tenth Region, Akjoujt,
- 5 at Nouakchott,
- 7 in the Sixth Region (Rosso Mederdra -Equiz - Boutilimit),
- 11 in the Fourth Region (Knaédi Maghama Monguel M'Bout).

This choice was determined by the level and accessibility of the Mahadras concerned, and the characteristics of the population.

Articulation of these schools with development programs cannot yet be envisaged. It may be possible in the future as and when development operations are established, or within subprojects of the Education Project. In the absence of integrated development operations, it has not been feasible (though it would have been desirable) to carry out the experimentation in such a framework.

d) Methodology of pilot projects

The study of the environment and the psychological preparation are followed by:

- i) An evaluative test of the cognitive achievement of the best pupils, from whom two pupilteachers per Mahadra will be chosen;
- ii) Initiation courses of one month's duration in each area of introduction in order to polish up the trainees' modern Arabic and mathematics, and to give them some preliminary educational training;
- iii) Opening of classes where the pilot project will be applied. This has two purposes: To train the pupil-teachers on the spot, and to test the program while it is being elaborated for the three following levels:
  - preparatory courses for young children prior to study of the Koran;
  - pupils who have completed their studies of the Koran and are following a program of language study and general education equivalent to the levels of elementary courses in formal education;
  - pupils who have completed their studies of the Koran and are following a program equivalent to medium-level courses;
  - iv) evaluation and follow-up.

The pilot project involves the three above-mentioned levels. As regards the post-Koran classes, an accelerated education

(two years) is envisaged to prepare the pupils for modern life, to improve their knowledge of Arabic, to teach them practical calculation and to educate them for a useful life.

In the long term, the pilot project aims to devise a primary education embedded in the cultural and religious climate of the "original" school

This education might include the following:

- a preparatory course before Koranic studies;
- 3 or 4 years of Koranic studies;
- 2 years of preparation for modern life in the environment concerned.

# 5. <u>Curriculum</u>

In the participating Mahadras 3 hours per day are devoted to the project - 1 hour for Arabic, 1 hour for social studies, and 1 hour for arithmetic.

# a) Learning modern Arabic

The purpose is to help the pupils progress from the sacred language of the Koran to a living modern language, which will serve at the same time as the language of instruction, and as a language of communication between the different ethnic families in the country.

The aim pursued in reading is to enable the pupils, first, to understand the curriculum content, and later, to read booklets, newspapers, reviews for additional information.

The exercises in written expression aim to develop skill in composing useful written matter: personal or official letters, reports, printed materials, etc.

#### b) Arithmetic

Arithmetic teaching has two important aspects: acquisition of knowledge necessary to solve the problems of daily life, and mental training which will enable the pupils to progress from traditional norms to a mentality closer to that of modern man.

The textbooks are designed with a view to solving concrete problems and stimulating thought processes that will lead to a critical examination of certain old attitudes.

#### c) Social studies

## They consist of:

- i) Civics education, which progresses from a study of traditional life situations towards a modern organization of the country;
- ii) Health education comprising three sequences: individual hygiene, collective hygiene and study of the human body;
- iii) Study of the natural environment, also in three sequences: minerals and plants, animals, physical environment;
  - iv) Geography, consisting of sequences on geophysics, geoeconomics, geopolitics, and general knowledge of Mauritania, the Maghreb countries and the two African neighbours, Senegal and Mali.

#### d) Affective development

Acquisition of knowledge necessarily leads to the acquisition of new attitudes. The Teacher's Guidebook (Guidedelleanimateur) dwells extensively on the traditional environment and on the methodological approach proposed for guiding the pupils from a traditional to a new mentality and behaviour, while always respecting fundamental values.

The approach used is to stimulate the group in the course of discussion meetings organized around a text for deliberation. All subjects concerning the social sciences are suitable for this approach, which serves to reinforce the spirit of observation in the older pupils (12 to 25 years), reflexion in the face of new behaviours and the sense of free choice (appraisal of innovations in relation to the original culture).

# 6. Difficulties Encountered

Owing to adequate psychological preparation of the popu-

lace and to information and training of the teachers involved, the project has been able to develop without hindrance from either side. In other areas, however, some difficulties have been encountered.

## a) Inadequate human resources

The lack of a full-time director has been a serious obstacle. For two years only two permanent officials (the Head of the Mahadras Service and the Coordinator) had been available to accomplish a wide variety of tasks: school administration, environment study, psychological preparation, initiation courses, establishment of new Mahadras, designing of the programs, follow-up and secretariat. In recent months the team has been reinforced by two educationists (a program designer and a national education counsellor). It is thus to be hoped that the coming tasks will be carried out under better conditions.

## b) Inadequate material resources

This inadequacy considerably impedes the project and entails serious disturbances of the operation. It applies in particular to management of the advance fund, the lack of all-purpose vehicles and the lack of premises and equipment for the reproduction of educational materials.

#### c) Reducation of costs

The major problem of the experimental system in Koranic schools is to propose an inexpensive basic education, i.e. one that is less costly than official education based on the European model. Efforts had, therefore, to be made (despite the difficulties this entailed) to reduce to a strict minimum:

- i) Equipment and functional material,
- ii) Remuneration of the teaching personnel. This was attempted by means of a grant to the Mahadras to be used for additional payments to the teachers pressing for compensation; it would be less expensive than increasing salaries, especially if semi-volunteers could be obtained who would do the work in the hope of promotion in two or three years.

# 7. Results Achieved

In September 1976, the project was to be applied to 40 classes comprising 1,634 pupils, a third of them females, in 25 Mahadras (1) in 4 different regions.

In respect of acquisitions, rapid progress can be noted in modern Arabic and in strong motivation for arithmetic. It may thus be expected that, after completion of Koranic studies, the basic skills needed for acquiring useful knowledge and an open outlook will be mastered in the space of two years. Finally, a considerable re-orientation of these Mahadra pupils towards modern life can be observed (last year some 70 focussed on modern teaching methods).

The above indications hold good promise for the future.

# 8. Future Activities

After this period devoted to trying out the Project, defining the contents, preparing educational material and training teachers, the following activities may be envisaged for its extension:

- a) Activities envisaged for 1976/77
- i) Organization:
  - organization of the Secretariat of Education and briefing of those in charge of coordination and direction;
  - completion of the program design work;
  - selection, allocation and briefing of the Provincial Educational Counsellors;
  - time schedule and organization of regional training courses for pupil-teachers (2 per school)

It is hoped that a reform of the Mahadras will entail a reform of the more numerous ordinary Koranic schools.

## ii) Preparation of extension:

- in the form of information tours, selection of an educational counsellor and of one Mahadra per province to serve as pilot school;
- preparation of two national level training courses for the administrative team.
- b) Activities envisaged for 1977/78
- Organization of the pilot Mahadra in each province, and assumption of charge of it by the Provincial Educational Counsellor:
- ii) Selection of Educational Counsellors of new Mahadras, and selection of pupil-teachers;
- iii) Preparation of a national training course at Atar for the Provincial Educational Counsellors and the pupil-teachers of 12 new Mahadras in the Northern Zone.
  - c) Activities envisaged for 1978/79
  - i) Extension of the project to 12 provinces of the Northern Zone;
  - ii) Comparison of the costs of the new education system with those of the official system;
- iii) Submission of proposals to the government;
  - iv) Organization of a Directorate of Education at the Ministry of Islamic Affairs, if possible.

# 9. Evaluation Efforts

Since June 1975, progress reports have been made every 6 months. In addition, self-evaluation is envisaged at several levels:

- Directors of Mahadras,

- pupil-teachers,
- pupils,
- Educational Counsellors.

In the case of the last-mentioned, self-evaluation has already begun, in that they have been asked to evaluate the programs, lesson by lesson, with a view to re-adjustment in the regional stages.

Before extension of the regional-level program to the whole of the country, it is hoped to make more thorough evaluation of all the elements of this experiment in the light of a further year of experience in the field with the aid of an evaluator from abroad. The help of such a specialist would in particular enable very precise participatory inquiries to be carried out in some well-chosen Mahadras.

Such an evaluation would be the best way of preparing the extension, as the necessary re-adjustments could be made on all emerging points, so that an instrument well suited to achieve the objectives could be supplied to the other regions.

# Conclusion

It is important to point out the difficulties of this scheme, which involves fundamental choices by the Mauritanian society. Several risks must indeed be avoided. Chief among them are:

- a) Arousing the mistrust of adherents of the traditional culture by appearing too revolutionary, or conversely;
- b) Confining operations to organizing the original education and helping to develop it, without achieving a degree of opening minds to modern life;
- c) Excessive formalization, which would deprive the new education of its extremely rare characteristic of emanating from the people themselves;
- d) According the new teachers a status approximating

that of the "Fundamental Education" system, as this would impede general implementation of the proposed new system.

The existence of these hazards must, of course, not militate against a project the usefulness of which is unquestionable, and which responds to a genuinely felt need. The very fact that directors of Mahadras sit down beside their pupils to be taught basic arithmetic skills shows that the Mauritanians most directly concerned have opted for some degree of modernization. This alone would allow them to escape their present marginal situation.

#### APPENDIX II

# SETTING UP APPARATUS FOR THE PREPARATION OF BASIC EDUCATION PROGRAMS

In this Appendix, various aspects concerning the organization of the work required to prepare basic education programs have been grouped, as follows:

- Definition of the tasks of specialists participating in the work;
- Designation or establishment of institutions for guiding and facilitating the work and enabling its results to be utilized;
- Determination of the human and material resources required.

# 1. Definition of Tasks

The problem is to accomplish original and many-faceted work with the aid of a large and heterogeneous team. Sufficiently precise terms of reference would constitute a sort of agreed protocol governing the relations between the responsible authorities and the team and those between the individual team members, which would facilitate dialogue and participation in the common taks. It would not be a rigid document. On several points, better knowledge of the field covered or a new factor imposed from outside (calling in of specialists not originally foreseen, change in the original time schedule, etc.) may lead to a modification of the terms of reference. It is desirable that such modifications be agreed upon among the people concerned, or at any rate, that they should have a very clear idea of what is involved and that the reasons should be explained to them.

In the following, the different categories that should be covered by the terms of reference are listed and examples are given where they may be useful.

## a) Objectives of the work

The objectives should be defined in the light of responses given to the questions mentioned in chapter 3, section, 1, paragraph c.

### b) Approach

The approach should be pragmatic and concrete (based on existing needs), experimental (taking into consideration educational experiments already conducted, launching experimentation in conjunction with new projects), global (not neglecting outright any section of the population nor any development sector), integrated (considering the totality of educational activities as a single system within which basic education should be placed).

#### c) Successive phases envisaged

The complex work involved in a project of basic education must be divided into simpler and more homogeneous phases designed in such a manner that each will lead to the following phase. For example: examination of existing activities and needs (first phase), drafting of programs (second phase), limited introduction (third phase), generalized introduction (fourth phase). Altogether, the point is to ensure that the team will follow a logically coherent procedure. It will be easy to assess the progress of the work by reference to the current phase or some part of it.

#### d) Time schedule

The entire work proceeds in a given time schedule where each phase has its exact place. Time is a resource just like personnel or material resources, but they can be substituted for one another only within certain limits. Hence, the team cannot be asked to achieve results without reference to the time it has available. For instance, a larger team could perhaps analyze things in greater depth or perceive aspects that had been neglected, but it would be imprudent to shorten the time allowed for the job. Quite the reverse: the synthesis of the work of such a team would in all probability require more

time. Given the necessity of close adaptation to an essentially rural environment, observation of facts and collection of data must include the entire agricultural cycle before the work of program drafting commences. Moreover, unless this would influence the results of the research, an effort should be made to ensure that the phase of intensive field work does not coincide with a season where natural conditions (e.g. rains) are unsuitable.

### e) Human resources required

As far as possible, the competencies of the team members, at least of its permanent core (educationists, economists, sociologists, ethno-linguists, etc.) should be identified before the exact nature of the problems to be studied is known. It is, however, advisable to provide for the use of other specialists as and when the need for them emerges. This will ensure the flexibility necessary to accomplish the work without interruption due to the lack of required supplementary personnel.

Too often, no indication is given of the staff that will be needed to run the secretariat, on the motto "l'intendance suivra" (the logistic services will follow), though this is rarely the case in countries where there is no abundance of qualified personnel. Good management of resources implies that the work of high-level specialists must not be hampered for material reasons, and that they should not be obliged to perform themselves tasks quite out of keeping with their high qualification. One point which merits special attention is the drafting, writing and reproduction of work sheet handouts and books and their distribution to teachers during the phase of limited introduction. Since at this stage documents are provisional ones and their distribution is limited to the requirements of the target areas, they must be reproduced in the normal course of the duties of a secretariat adequately staffed with competent personnel and equipped with the necessary machinery. In the absence of such facilities, the project will be delayed or lose its impact, because pre-existing educational material not perfectly adapted to local requirements will then have to be used.

Before the pilot project is launched, it is equally necessary to foresee whether expatriate personnel will be required. Obviously, this can be justified only in the case of high-level and widely experienced specialists who are not available locally. Personnel of this type, coming usually from international or-

ganizations or research institutions, tend to have many commitments and should therefore be contacted in very good time if they are to make themselves available at a suitable date. It should, however, be borne in mind that a team consisting predominantly of highly qualified nationals has a better chance of exerting a favourable influence on later government decisions.

## f) Material resources required

What has been said about secretariat staff applies equally to the material resources. If the substantial expenses incurred in assembling a high-level team are to produce worthwhile results, the team must encounter as few obstacles as possible, whether in the form of premises, equipment or supplies. An especially sensitive point is transport. In work of this kind, frequent contacts with the environment are essential (surveys, interviews, etc.). Field work must not be hindered by the lack of means of transport suited to local conditions, which often demand vehicles that can be used on any kind of terrain.

### g) Financing

To avoid any later difficulty in this regard, the financial means available for the work should be precisely indicated. Where the World Bank participates in financing it, its contribution generally concerns expenditure in foreign currency; especially the expenses incurred by employment of expatriate personnel and purchases of material abroad. However, the importance of prolonging the period of program preparation by a phase of limited introduction may cause the IBRD to broaden its contribution.

# h) Institutions and relationships

The terms of reference should include the two points discussed below.

# 2. <u>Institutional Aspects</u> (1)

A number of conditions regarding institutions must be ful-

Where a basic education project is financed by the World Bank, as it is in Mali and Mauritania, it forms part of a broader education project, and there will be a special unit concerned with administration and finance.

filled if the work is to be carried out under favourable conditions, and if its outcomes are to receive sufficient attention.

## a) Designation of the responsible ministry

The choice of the ministry which will be responsible for the project is of top priority. The ministry must have real concern for the problems of basic education, and this concern must manifest itself in active and permanent support of the work by means of the resources available in the services under its control. Logistic support from its field services, in particular from primary school inspectors and heads of establishments, is particularly valuable. Most often it is the Ministry of Education that takes on this responsibility. One rule should always be observed: the work should be under the control of that ministry which will be the principal beneficiary of the outcomes.

#### b) Establishment of an advisory committee

However competent the team members may be, they will have to open and maintain a fairly frequent dialogue with people who, by virtue of their functions or their special knowledge, are able to give advice. Indeed, full advantage should be taken of assistance from those whose commitments prevent their full-time participation. Besides, the opinions of non-participants will be of value, because they will probably have a more objective attitude to the work. At the very least the advisory committee should include the following:

- the person responsible for nonformal educational activities,
- the person responsible for school-type basic education,
- the person responsible for health education,
- the person responsible for agriculture extension work,
- various specialists (statisticians, linguists, etc.), whose cooperation could be limited to the phases requiring their special competency.

It is suggested that this committee should have a purely

consultative function, i.e. that its members should participate only in their personal capacity and as specialists, and that meetings should be chaired by the project leader. Members of the team could be present at committee meetings when this is useful. However, in order to ensure efficiency no more than a dozen people should attend any particular meeting. Where necessary, the opinions of the committee could be communicated to the ministerial committee.

## c) Establishment of an interministerial committee

There would be no overlap between the advisory committee with its essentially technical role and the interministerial committee. The latter, meeting at the end of each work phase, would inform the ministries and services concerned of the progress made, and present and discuss guide lines as and when they emerge. The purpose of such action would be to stimulate interest in the enterprise and to facilitate a subsequent examination of the provisional results (prior to the phase of limited introduction), and later of the final results. In fact, the interministerial committee would play a political rather than a technical role, namely to prepare the ground for government decisions after completion of the work. Consequently, there should be strong representation at the committee meetings (Ministries of Education, Planning, Health, Social Affairs, Agricultural Production, Finance, etc.), and the members should act not as individuals but as representatives of the Ministries. The representative of the ministry responsible for the project should be considered automatically the committee chairman. Members of the advisory committee could be requested to furnish opinions and information to this committee.

# 3. Human Resources

In the following, additional suggestions concerning the project personnel will be presented.

# a) The project leader

The selection of a leader poses delicate problems. Ideally, he should:

i) enjoy the full confidence of the responsible Ministry, and have access to it;

- ii) be on a hierarchical level high enough to place him on an equal footing with the directors and heads of services with whom he will have to deal;
- iii) have the administrative and financial competence that will enable him to discuss relevant matters with each project unit and to follow the procedures employed in their work;
  - iv) possess the technical knowledge, the open mind, the human qualities and the practical sense that will enable him to guide the teams in charge of activities as well as the services involved;
    - v) be good at public relations.

Since it is very difficult to find someone who has all these qualifications and is also available for full-time work, the chosen leader will quite often continue with his previous commitments and devote only a few hours per week to the project. In that case, it will be necessary to appoint a coordinator who will play an essentially technical role, while the project leader concerns himself primarily with the administrative and financial aspects and with public relations. One of his functions will be to lead the advisory committee and the secretariat of the interministerial committee described above, if necessary with the help of the coordinator.

#### b) The team coordinator

In cases where a coordinator is required, his formal educational qualification is less important for the project's success than his experience of education in the regions or countries concerned, his ability to integrate and synthesize the concerns of the various specialists, his organizational skill and human qualities enbaling him to hold the team together. He should be not only a scholar but also a man of the earth, and these two qualities are not often combined. His task will be particularly difficult at the time of drafting the report for submission to the authorities.

### c) The permanent central team

As the development of basic education programs involves many domains, it is desirable that the different disciplines (education, sociology, rural economy, linguistics, etc.) be represented in this team.

The role and composition of the permanent team may vary considerably according to whether it has a possibility of obtaining assistance from specialists working in various organizations, or whether it has to accomplish the entire work itself. In the extreme, both cases involve some risks. In the first case, the team will lose some of its autonomy because it will be subjected to the constraints imposed by organizations which have their own working rules and activities, and the desired integration will be difficult to achieve in such circumstances. In the second case, there is a serious risk that the team may become isolated, lose contact with the work done elsewhere and thus impoverish its own achievements.

To avoid these risks, a team including a specialist of each of the disciplines necessary for the project might be envisaged. These may vary according to the characteristics of the countries and the objectives they assign to basic education. This team would constitute a self-continued unit. However, each member would enable it to profit from the results of external work done in his own discipline and, as far as possible, orient this outside work towards the needs of drafting the project program. Only if no such outside possibility exists for an essential point should the team be enlarged by a specialist in that particular area (1).

#### d) Occasional collaborators

At certain times, especially when surveys have to be made, a large staff is required. The permanent team serving as the core will then be temporarily supplemented by a number of collaborators. A very useful method is to recruit university stu-

In Mali, the permanent team included in April 1976 half a dozen specialists, the majority of them sociologists and linguists. At the same time in Mauritania, only the inspector of Mahadras collaborated permanently and efficiently with the coordinator.

dents to whom this work offers an opportunity, either of applying in practice the knowledge they have acquired, or of collecting useful material for an essay or a thesis. There is also a possibility of obtaining the assistance of officials or agents of the various development sectors, who may enhance their own prospects by participating in the project. Finally, employment of full-time researchers for short periods would utilize the available intellectual capital and facilitate the selection of possible future collaborators. All these types of temporary assistance have been widely used in Mali.

## e) Organization of working groups

An efficient means of taking advantage of existing competences would be to organize working groups for investigating specific problems. They should be guided by the corresponding specialist in the permanent team. To be useful, these groups should be set up only when a need for them is genuinely felt, and when the problems they are to deal with have been clearly identified. As soon as these problems have been solved the groups should be disbanded. They should operate without any formalism. The members of the groups should be individually coopted by the team members. Obviously, it is impossible to draw up an exhaustive list of such working groups, but the following are a few examples; a group for:

- each of the envisaged languages of instruction,
- health education.
- promotion of women,
- mathematics teaching,
- literacy methods,
- functionalizing the content of education according to the principal sectors of activity, the way of life and the target population.

# 4. Material Resources

Even assuming that the entire resources necessary for the project have been provided for, two conditions are still required if its progress is not to be interfered with or obstruc-

ed: flexibility of procedure, and availability of the necessary resources at the right time.

The procedures for managing public funds have not been conceived so as to meet the requirements of work of this nature. The financing of research or surveys, the costs involved in the reproduction of documents and minor materials, the paid holidays of temporary collaborators, often call for a flexibility and swiftness of action that cannot be achieved through normal procedures. In such a situation, a possible answer for the countries with a tradition of French administration may lie in the creation of an advance fund which may be drawn on without prior sanction by the financial services, provided a justification is supplied later. This fund should be sufficiently large at the start and should be replenished when necessary.

As far as equipment is concerned, it would be useless, for example, to obtain all-purpose vehicles after the investigations have been completed. This means that all decisions necessary to provide required material at the right moment should have been taken and all purchasing processes initiated before the project is launched.

## APPENDIX III

PARTICIPANTS AT THE DAKAR MEETING ON BASIC EDUCATION IN THE SAHEL 13 - 17 December, 1976

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- C. Delivery system. Institutions, Organisations
- D. Experiences. Realisations. Projects
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