



UNITED NATIONS EDUCATIONAL,
SCIENTIFIC AND CULTURAL ORGANIZATION

Priority: Africa

Programme of action proposed by the Director-General
(1990-1995)

Strengthening Co-operation with the African Member States

This document proposes a general framework, on the basis of which
specific development projects and activities will be worked out
at the request of the governments of the region

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FOREWORD

In the pages that follow I set out some general considerations that need to be borne in mind in assessing the reasons for and objectives of the special programme I am proposing for Africa, which is designed to extend over the period of document 25 C/4.

I wish, however, to highlight three of these considerations so that the scope and nature of the programme may be clearly perceived.

The first thing to be said is that the programme fits into the context of the Lagos Plan of Action and is aimed, within Unesco's spheres of competence, at the development of all the Member States of the Organization of African Unity (OAU). While the situation of the least developed among these countries clearly requires very special attention, I take the view that those African countries which, to varying degrees, have greater resources at their command must be associated with the programme not only as beneficiaries but also as technical contributors, in the context of technical co-operation among developing countries (TCDCs). It is also clear, given the urgency of the needs it throws into focus, that this programme embodies an appeal for contributions from all Member States of Unesco, as well as from the funding institutions of the United Nations system, in particular the United Nations Development Programme (UNDP).

Secondly, this is an outline programme and, as such, sets out the main lines of what is intended to be a many-faceted programme of action. It should not be taken either as an exhaustive enumeration of what Unesco will do in Africa in the next six years, nor as a catalogue of projects already drawn up by the Secretariat: it is for the African governments to communicate to Unesco their special needs together with suggestions for specific projects in keeping with the broad outlines of the present programme, which is itself based on information that African decision-makers have already given me concerning their urgent requirements.

Thirdly, the implementation of this programme should serve to give fresh impetus to Unesco's action in Africa, and should not be an end in itself. Although I plan to carry out a mid-term review, followed by an evaluation at the end of this programme, 'Priority: Africa' is essentially designed to sow new seeds and plant new roots that will sprout and grow in the future.

My hope is that this outline programme will be received with enthusiasm, rather than chilly scepticism; and that, although I have not couched it in dramatic terms, it will convey to all Member States the sense of urgency I myself so strongly feel.

GENERAL CONSIDERATIONS

For some decades now Unesco has been making considerable efforts to accompany its African Member States along the path of development. These efforts and their results are fully described in the recent publication entitled 'Unesco and Africa'. It may be asked in these circumstances what my reasons are today for presenting a programme of action specifically devoted to Africa, at a time when I am submitting to the Organization's governing bodies the draft third Medium-Term Plan (1990-1995) and the Draft Programme and Budget, of which it represents the first phase (1990-1991). I think, therefore, that, while there is no need to justify this initiative, I should underline the various reasons that make it imperative at this time.

Let me just state for the record that, almost immediately following the decision of the General Conference to entrust me with the responsibilities I currently exercise, I indicated at my first press conference my intention to commit myself personally to ensuring that Africa would be a priority for Unesco. I have subsequently restated this commitment on numerous occasions to the General Conference and the Executive Board.

The stand that I adopted as the new Director-General of Unesco enabled me to take the necessary steps to involve the Organization as actively as possible in the Programme of Action for African Economic Recovery and Development (UNPAAERD), adopted by the United Nations General Assembly on 1 June 1986 and scheduled to run from 1986 to 1990. This decision by the international community was based on an analysis of the problems experienced by the continent - an evaluation of which at the mid-point of the programme of action revealed that by 1988 they remained as acute as ever. This made it all the more necessary for Unesco to contribute fully, within its spheres of competence, to international action on behalf of African development.

Since taking up my duties, I have personally met most of the African ministers of education, with whom I have straight away established constructive relationships of mutual trust. I have met them either at the Organization's Headquarters in Paris or during my information-gathering and contact-making missions in Africa itself. In virtually every case, those with whom I spoke reported situations which, far from improving, were growing worse - in many instances as a consequence of so-called 'structural' adjustments that had been applied without a full grasp of all their social repercussions. What I heard, as I went from one meeting to the next, was in fact a cry of alarm, and an urgent request for Unesco to contribute actively and rapidly within its fields of competence to finding a way out of situations that, if they were to continue, would move from the serious to the tragic and from the disquieting to the irreversible. It goes without saying that I could not do other than heed such an appeal addressed to the Organization.

Faced with a whole array of reasons for setting up a plan that would address the urgent problems of Africa and that would also - naturally - reflect the requests of the governments of the region, I should naturally have liked to have had at my disposal financial resources vastly greater than those that Unesco, in this difficult period with which we are all familiar, is able to mobilize under its budget. Nevertheless, aware that in any case our Organization has never received, since its creation, the funds that would have enabled it to fulfil its mandate in all aspects, but that this inadequate funding has not prevented it from achieving great things, I felt that the comparative shortage of resources immediately available would be a feeble excuse for failing to respond to such an urgent challenge.

It remained to determine which areas to select and what procedure to adopt to give shape to a priority programme meeting the threefold requirement of:

- (i) making a constructive and identifiable contribution to the United Nations Programme of Action for African Economic Recovery and Development;
- (ii) falling within Unesco's fields of competence, while providing as far as necessary and possible for the closest co-operation with the other agencies of the United Nations system and focusing in particular on areas of activity commonly overlooked by the general run of international aid;
- (iii) pursuing the most vigorous action conceivable within the scope of our possibilities, it being understood that Unesco, which is not a funding body, will ensure, in association with Member States, the closest and most sustained co-operation with multilateral and bilateral sources of development financing.

The main characteristics of such a programme are what must now be considered.

IDENTIFYING THE FIELD OF ACTION

1. Framework provided by the General Assembly's Programme of Action for African Economic Recovery and Development 1986-1990

It should be remembered that, in adopting the General Assembly's priority programme in 1986 on the repeated recommendation of the African Member States themselves (particularly at the highest level of OAU), the international community gave clear priority to the development of agriculture on the continent. There is no need to rehearse the analysis which led the General Assembly to adopt this approach. As I have already pointed out, there has been no significant change in this regard since the adoption of UNPAAERD as the food situation and rural living conditions in Africa remain the same as they were in 1986 despite the efforts made.

Development of
African
agriculture
by people and
for people

This priority assigned to agriculture, a sector that does not in itself fall within Unesco's spheres of competence although the Organization does contribute to agricultural education under its programmes of education for rural development, posed for the Organization the question of how it could and should contribute to the implementation of the United Nations Programme of Action. Before the Programme was finalized and adopted, Unesco had, in a publication entitled 'Getting to the Roots of the Problem', contributed to the reflection then under way on suitable lines for an international programme for Africa. This paper basically stressed the fact that any process of economic development, particularly agricultural, if it was to be successful and sustainable, should take into account not only the quantitative and visible economic aspects of these sectors, but all the factors involved - first and foremost those of an educational and cultural nature.

In fact, the text of the Programme of Action adopted by the General Assembly, although basically focused on agricultural development in the strict sense, did include explicit reference to a whole range of input areas in which action had to be undertaken in order to lay a sound basis for the efforts towards agricultural development. Many of these areas require an imaginative and energetic response by Unesco, often in close co-operation with the other organizations of the United Nations system, above all FAO. Thus we find that the text of the Programme of Action itself identifies the bases for agricultural development, which Unesco can help to lay. Moreover, it is our responsibility, whenever these references are not explicit, to use our experience of development issues to draw attention to problem areas which, if not tackled in time, are likely in the long run to compromise the results of the efforts undertaken.

Actions in support of agricultural development in which Unesco has a direct contribution to make include most of those grouped under the heading 'Human resources development, planning and utilization' in the United Nations Programme together with the scientific and technical components of drought and desertification control.

Foremost among the measures deemed desirable, the Programme mentions the advisability of 'Radical change in the educational systems at all levels to ensure that the skills, knowledge and attitudes that are relevant to Africa's developmental needs are generated' and 'Intensification of efforts to promote mass literacy and adult learning programmes'. These two lines of action are closely complementary given the importance of education systems, particularly at the primary level, in the literacy process itself and the role of secondary and higher education in the training of personnel and the planning of literacy campaigns. Very special account must be taken at all these levels and in all these fields of data and measures relating to women.

We shall also see the complementarity that must in practice exist between education in general and, on the one hand, culture - which must inform the content of education with authenticity and relevance, without which it leads to the loss of community and national identity - and, on the other, communication whereby this same content may be transmitted outside the system and beyond school age, thereby helping to institute a genuine process of lifelong education, or rather to restore it, since such a process has long characterized traditional African education.

Given, moreover, that scientific and technological research, the sine qua non of effective efforts to combat drought and desertification, is inconceivable without the support of an effective and appropriate education system, it follows that Unesco's action under the priority programme proposed here will necessarily assume an interdisciplinary and intersectoral character - something I shall personally be concerned to ensure is constantly observed. It is now the time to look briefly at the components of this Programme - components that will be synthesized at the operational stage.

2. The educational field

Here we encounter a number of key complementary objectives (modernization, adaptation and reform of education systems), the pursuit of which calls in theory for a whole range of operations from which it appears to me essential, in the context of a priority programme, to make a selection enabling the Organization to focus its action, given that the main effort, particularly financial, will continue to rest with the governments in the region and that Unesco will naturally intervene only at the request of the governments concerned.

In a continent where observations in many cases point to a process of declining school enrolment rather than the consolidation of school systems, action aimed at achieving a massive rise in the educational level - which is bound up with the struggle against illiteracy - implies both the overhaul of content and the updating of means. Unesco can contribute on both fronts within the existing institutional framework of the Network of Educational Innovation for Development in Africa (NEIDA) run by the Regional Office for Education in Africa (BREDA), Dakar, Senegal.

Revision and adaptation of educational content

With regard to content, Unesco can help governments to substitute endogenous for imported material, i.e. to replace content often inherited from the colonial period and designed for quite different circumstances with a content relevant to the African context at the close of the twentieth century - in particular, by incorporating in curricula references to national and local cultures and making use of African languages. In my view this requires an approach involving the introduction in curricula of material oriented towards the solving of real problems (problem-solving education).

Environmental literacy

One real problem, for instance, is that of environmental degradation in Africa. Even if such degradation, which ultimately leads to desertification, often has natural causes related to climate - such as irregular rainfall - or to the fragility of certain ecosystems due in part to the shallow soils found in Africa, it is nearly always aggravated by human action. Slash and burn practices and deforestation to clear land for agriculture or to obtain wood for fuel or construction purposes all expose denuded land to accelerated wind and water erosion and empty it of its original wildlife. These examples - unfortunately only part of the picture - of the adverse effect of human action on the environment are the sign of a lack of awareness of a problem to which there can be no lasting solution until a place is found in curricula for education about the environment (or 'environmental education'). In this area Unesco, in collaboration with the United Nations Environment Programme (UNEP), has amassed considerable experience which could be immediately made available to African States.

Population dynamics in educational content

The population dimension of development problems is fairly different in nature, but cannot be neglected in a continent whose population will probably exceed one thousand million in the next twenty-five years. Here again, while there can be no question of adopting a Malthusian-type attitude or upsetting cultural or religious feelings, educational content that does not provide the basic facts required for the development of responsible attitudes among individuals and the community lacks relevance to a significant extent. In this area too, for the most part with the financial support of the United Nations Fund for Population Activities (UNFPA), Unesco has acquired a considerable body of experience, particularly in the African context.

Educational content that has been rethought in terms of problems to be addressed and solved must also - and perhaps above all - incorporate health-related components. It is inconceivable that some school curricula in Africa should

Teaching
health

continue not to provide information on such impediments to life and development as malaria and acquired immuno-deficiency syndrome (AIDS) - to mention only two of the scourges in this area existing in Africa, to which the World Health Organization (WHO) accords high priority. Health education must be developed and extended in a form adapted to needs, particularly at the primary and secondary levels, within the framework of the existing co-operation in this field between Unesco, WHO and UNICEF.

Education
geared to
productive
work

A problem of a different order but equally acute concerns the need to revise educational content by gearing it on training for directly productive employment. Such an approach, which in no way implies neglecting general culture, is required at all levels, from primary through to higher education. Education leading only to unemployment among young people, which has too often the result of education systems devised without taking any real account of the economic environment, is to be opposed wherever it is found, and particularly in a region where - despite the major sacrifices made by States and populations - the financial resources available for education and training are fated to remain critically limited in both the short and medium term, while social demand continues to grow. The experience acquired jointly by Unesco, ILO and FAO enables us to co-operate with Member States with a view, once again, to imparting greater relevance - hence efficiency - to education systems embarking on a revision of content.

More specifically, I have on innumerable occasions heard the Africans to whom I have spoken express the wish that they could develop their technical and vocational training in order to overcome the shortage of middle-level technical personnel currently affecting African agriculture, as indeed other areas of activity in Africa. The first result would be to enable countries to benefit from science and technology transfer, thereby enhancing their endogenous capabilities and helping to optimize economic and social development projects already under way. Increased action in this area would be wholly in keeping with the spirit of the draft International Convention on Technical and Vocational Education to be submitted to the General Conference at its twenty-fifth session, and it would also be in line with Unesco's continuous efforts to ensure that 90 per cent of the world's scientific and technical potential does not remain concentrated in the hands of 10 per cent of the world's population.

All that has been said about the need to ensure the relevance of education systems and their content naturally applies to out-of-school education in all its forms, particularly to literacy programmes. International

Fresh impetus
for literacy
training geared
to development

Literacy Year (1990) and the launching of the Plan of Action for the Eradication of Illiteracy in All Regions of the World by the Year 2000 should - in conjunction with the Regional Programme for the Eradication of Illiteracy in Africa launched in 1984, which needs to be strengthened - provide the opportunity for particularly vigorous action in Africa, which has the highest percentage of illiterates, particularly among the female population where the figures are alarming. Unesco will continue to support literacy projects in which it already participates and is ready to become involved in any new ventures, particularly concerning women and young people without or with incomplete schooling. The effect of such measures should be to provide the basic knowledge to enable adults to improve their quality of life and place their potential in the service of economic and social development. Here again, content can and must be geared to vital problems of health, nutrition, environment and farming methods on whose solution the success of the development process depends.

More generally, Unesco - which, as has just been said, is ready to support governments in introducing basic information on the environment, health, population or work preparation into curricula since it is generally recognized that proper weight has not been given to these factors in the past - is also prepared to provide the same assistance and advisory services for the revision of any other branch of educational content where this is likely to increase the relevance of education systems. One example would be science and technology curricula, particularly at the primary and secondary level.

If one proceeds to consider the means that are - or should be - available to education systems, and if one takes as one's objective the modernization and increased efficiency of these systems, some of the many possible areas in which Unesco could take action under a priority programme need to be highlighted.

Textbooks
adapted to
needs

I would propose first of all a quantitative increase (the objective must be one book per pupil) and a qualitative improvement in textbook preparation in Africa itself. I mean by this the entire preparation process, from the devising of educational content to the production of books as objects and tools of learning. For it is important that texts, prepared in the closest possible proximity to the cultural context in which the book itself will be used, should be informed from the start by those realities that define this context. It is also important that publishing capabilities in Africa should be strengthened, as this is a significant factor in self-sufficiency. Steps must be taken to promote co-operative subregional groupings, within which responsibilities for the production of textbooks in different disciplines would be divided up.

This emphasis on textbooks - necessary if traditional teaching aids - in no way implies that Africa should lag behind - or rather even further behind - with regard to

Africa and
the need for
up-to-date
computer
techniques

modern technological resources. I even think it would be timely to begin right now introducing informatics into African education systems. Not to do so, and to do so urgently, would certainly impose a serious handicap on African young people compared to those of virtually all the other regions, a handicap that would be made daily worse by rapid technological change. The introduction of informatics now, which some might consider costly, will in the fairly short term prove an economical measure, given that it will one day be necessary to introduce informatics in Africa in the same way as elsewhere - at a much higher cost and with no real guarantee of success. Moreover, if this is not done by Africans now, it will soon be carried out by personnel from other regions; this would serve to increase the economic and technological dependence of a region which must, on the contrary, free itself to the maximum of existing external constraints. In addition, there are grounds for thinking that hardware manufacturers, sensing potential markets, might in the first instance participate massively in installing computers in African education systems, pending the time when the region can produce its own computer tools. With regard to the command of computer languages and the development of software, which are at least as important as the existence of hardware, I shall return to this subject when I refer to the training of teaching staff. This is however the place to note that teacher-training colleges and institutes should clearly be the first to receive equipment, together with documentation centres - a number of which are already computerizing their operations with the assistance of Unesco.

Education
that banishes
distance

It is, in my view, just as necessary, and just as realistic, to take steps to enable African countries to use the teaching aid of television - a tool that communication satellites have made more flexible. I have in mind in this regard using television both for distance learning as such and as an aid in classroom teaching. There are, admittedly, methodological problems to be overcome, related in particular to the necessarily large number of languages of instruction: Unesco has experience in this area that is sufficiently rich and varied to be utilizable in Africa immediately. Whatever the case, it would be perverse in a continent where distance is such an obstacle to communication between people and institutions to fail to use the teletransmission of images for teaching purposes.

The priority areas to which I have just referred in which the Organization could undertake action with regard to material resources do not represent an exhaustive list. I think in particular of the importance of pursuing co-operation with the African Member States on the design of low-cost, multi-purpose buildings and furniture. Whatever the case, no effective action can be taken in respect of equipment if due account is not taken of that assuredly vital and crucial resource - qualified and motivated personnel. This is true of the public or private sector, of teaching staff or those responsible for

The education system is as good as its staff

managing the systems, and particularly of specialized educational statisticians, without whom systems cannot be managed or planned for lack of knowledge about their own functioning. Considerable efforts are required in Africa to ensure that such staff acquire and maintain adequate standards, at the same time as increasing in number according to needs. There can be no doubt that a key role, which Unesco cannot play, rests with governments and private-sector decision-makers as regards making the professions of teaching and educational administration more attractive, particularly through higher remuneration. On the other hand, Unesco can provide an input in the form of its wide experience of teacher-training methods. Such training, like any other, must be continuous and not confined to the invariably too short initial training period. This need is all the greater if one wishes, as I suggested above, to introduce such communications technology as computers and television into the educational process.

It seems to me important to show how useful it is, whether with reference to teaching content or to the means to be employed, to act on all levels of the education system, particularly universities. These, and higher education more generally, are more directly observable than education systems as a whole; the same kind of difficulties can be detected and the same solutions reveal themselves to be essential.

Helping African universities

In a continent suffering from grave economic problems, young African universities have felt the full impact of the financial constraints imposed on States: they have seen their resources diminish at the same time as numbers have increased rapidly due to the pressure of demand for higher education. A distortion has been created and remains between the number of students, the number of teachers and the physical capacity of the system, while management capabilities remain too weak to meet challenges on such a scale. Curricula and research topics too often lack relevance to the social and cultural situation of the countries concerned and to their overall economic development effort. (It is significant in this respect that there is not much emphasis in Africa on the social sciences, which would make for better knowledge of the human environment by Africans themselves.) The frequent weakness of university strategies, or shortcomings in defining the task of higher education, are significant factors in the confusion and lack of motivation both of teaching staff - whose status and level of remuneration are seen as offering little incentive - and of students, who feel apprehensive about their dismal employment prospects. While not the only cause, this ailment affecting African universities is a major contributory factor behind a terrible brain drain, which a recent report by the United Nations Economic Commission translates into some alarming figures. In 1987 there were millions of diploma-holders of all levels who were unemployed in the region. Paradoxically, a number of countries were simultaneously employing expensive

by ensuring
that Africa
retains its
brain power

expatriate labour in various sectors of the economy: in 1988 eighty thousand expatriates were involved in technical assistance in the public and semi-public sectors in forty sub-Saharan countries alone, at a cost of over ~~four~~ ^{four} thousand million dollars; roughly ten thousand of these technical assistants were working in the agricultural sector. Such a situation is bound to have a serious demotivating effect on African diploma-holders: it is estimated that thirty thousand left Africa between 1984 and 1987 to fill - mostly in the industrialized world - posts for which they had been trained.

Like all the problems I have referred to above, this rampant malady which is continuously depriving Africa of some of the brightest of its offspring was foremost among the concerns of ministers and others responsible for education in the region with whom I have had the opportunity to speak over the last two years; and on each occasion I was asked to ensure that Unesco helped them to cure it.

by enhancing
the role of
higher education
in development

I have reached the conclusion that the main lines of the priority assistance that Unesco could be asked to provide in the area of higher education are the following:

- (a) action - at the initial training stage and through in-service training - to raise the level of teaching personnel;
- (b) improvement of the quality of research conditions and facilities (computer equipment, subscriptions to scientific and technical journals and to data banks);
- (c) modernization of the storage, monitoring, management and exploitation of scientific and technical information, through appropriate equipment and high-quality staff;
- (d) improvements in both the quality and professional efficiency of university management and administrative personnel;
- (e) revision of the content of curricula and teaching equipment with the aim of making them more relevant to the problems of economic and social development - to be undertaken in all subjects, with particular emphasis on scientific and technological subjects and on the development of the social sciences;
- (f) help to governments for the improved planning of the scholarships they award, with particular reference to ensuring that the courses of study followed by African students abroad are relevant to the needs and problems of their own countries and qualify them for employment on their return to Africa;
- (g) strengthening the capacity of universities to communicate among themselves, whether through the promotion of joint activities, through exchanges of teaching staff or students, through participation in joint research projects, through the free and rapid circulation

among them of the teaching tools and data they possess, or through co-ordination to avoid duplication involving a negotiated regional division of specializations, whereby - as a result of a clear definition of priorities - increased resources could be made available so as to achieve international standards of excellence;

(h) efforts to help African universities break out of their too frequent isolation by bringing them into contact with the cultural, scientific, technological, economic and industrial communities of other regions.

This array of measures, all of which are aimed at an optimal use of university resources and potential, could be carried out under two existing institutional mechanisms. These are the committee set up in 1987 to advise me on strategies for improving the quality and relevance of higher education in Africa and the special programme for the improvement of higher education in Africa, currently under consideration by UNDP, which provides for a regional mechanism for implementing projects aimed at strengthening the scientific and technological potential of higher education institutions.

3. The scientific field

Just as my discussions with decision-makers in Africa convinced me that there can be no lasting solution to the African crisis without the development and improvement of education at all levels, nor without the realization of potentialities in all areas of culture (a point to which I shall return later), so they confirmed me in my conviction that Africa will not become what it could be until it acquires a command of science and technology, with all that this implies particularly in terms of research activities, that is to say, until it shows that creativity without which no development can be sustainable for lack of roots in the environment to be developed. This is a basic truth, valid in fact for all regions, even if the situation in Africa is more critical and serious than elsewhere because of the accumulated development lag.

Combating
drought and
desertification

In any event, the United Nations Programme of Action for African Economic Recovery and Development includes an appeal for effective action to combat drought and desertification involving measures which all require, prior to implementation, thorough scientific and technological research. It seems to me worth while reminding ourselves what the measures advocated by UNPAAERD are, since simply listing them is sufficient to show the benefit they can derive from Unesco's collaboration: protection of common ecosystems; massive afforestation and reforestation; better management of water resources ...; development of alternative sources of energy to replace wood fuel; stabilization of sand dunes; measures to stop soil erosion; measures against salination in river basins and coastal zones and, generally speaking, integration of measures for the protection of the

environment in national development programmes, according them high priority. One may properly add to this list measures that already appear in the Special Programme of Assistance to Africa in the Fields of Scientific and Technological Research, such as combating erosion of coasts and estuaries.

Environmental
protection: a
vital need

On each of these fronts, Unesco is ready as of now to promote or support original action devised at the national level and based on existing scientific findings, particularly in the areas of geology and water resources - action without which any statement of the measures to be taken would amount to no more than an incantation. Thus, when it comes to halting deforestation caused by the gathering of wood for burning (which affects soil stability and leads to soil erosion), Unesco can assist governments in the use of new and renewable sources of energy, such as solar energy and biomass. I reiterate that in many areas such as this one, the know-how of Unesco is already available and can immediately be used to help African authorities and institutions.

However, Unesco's services can be used other than in this isolated way. Most of the problems addressed in UNPAAERD often call for more complex action. In fact, all these areas require that Africa, without relegating the inception or continuation of specific action to a vague future, should build up a human and technical research component that will in the long run ensure the continent's independence in the consolidation of results on the various fronts of the peaceful struggle I mentioned above. These areas all appear not only in the Man and the Biosphere (MAB) programme but also in the section devoted to research on the development of the continent's natural resources in Unesco's Special Programme of Assistance to Africa in the Fields of Scientific and Technological Research. I would recall that this section also includes two highly pertinent items, namely research to improve the food situation, and the development of marine sciences. In all these areas, just as important as the level of research is, in every respect, the training of scientific and technological personnel for applied research.

At this point a few examples can easily demonstrate the fact that Unesco is already engaged in actions that fall directly within the scope of UNPAAERD and that African governments and/or subregions can request the Organization to support them in similar actions. We could take for instance those Sahelian countries that intend to strengthen their scientific capacity for the purposes of agrosilvopastoral development, in order to enhance the effectiveness of national and regional strategies against desertification, for increased food production and for the improvement of rural living conditions. What do these countries need in order to achieve their objectives? On-going research programmes need to be encouraged in a co-ordinated way. To do this requires the strengthening and consolidation of the functioning of an optimal number of research and experimentation stations or sites in the

For a larger number of viable scientific research centres in Africa

field, in particular by training the personnel involved and improving their equipment. Researchers from these stations, like those from central institutions, must become familiar with the methods of interdisciplinary research applied to natural resource management and physical planning. Lastly, there must be close co-operation and a continuous exchange of information in all fields related to rural development and drought and desertification control between the countries and the research stations concerned. Overall action of this kind is currently being implemented in the Sahel with bilateral financing and in co-operation with the Institut du Sahel (Permanent Interstate Committee for Drought Control in the Sahel - CILSS).

For Africa to improve its knowledge of the continent by the establishment of a co-ordinated network for the exchange of scientific and technical information

Another example is that of a Unesco project which comes under the intergovernmental MAB programme and is financed by UNDP. This project, implemented at the request of a government, involves carrying out detailed interdisciplinary research aimed at acquiring the most comprehensive knowledge possible of a specific, endangered ecosystem. All this co-ordinated data has to be gathered both to determine the investment needed for development and the factors that will ensure the conservation of the environment, and to provide the basis for continued scientific observation of the natural and human environment concerned. It should be stressed that a project of this kind is of more than local or national interest. The research to which it gives rise (in both the social sciences and in fields such as the physico-chemistry of the atmosphere, botany, agronomy, forestry, pedology, hydrology, limnology, etc.) may produce findings of interest to other regions with a similar climate and may be considered as a pilot project with a multiplier effect.

Strengthening inter-African co-operation in science and technology

Another form of action especially beneficial in the long run would be the establishment of new co-ordinated networks for the exchange of scientific and technological information in specific areas. In this respect I would like to mention the example of the African Biosciences Network (ABN), or the research and training project leading to the integrated management of coastal systems, both currently being executed with help from UNDP. A project of much broader scope - and one whose strengthening I feel is vital - is the African Network of Scientific and Technological Institutions (ANSTI), run from the Regional Office for Science and Technology for Africa (ROSTA) in Nairobi, Kenya, which should make it possible to use to the full the potential of each and every one of the institutions involved. Furthermore, I am giving the highest consideration to the recommendation made by the Second Conference of Ministers of African Member States Responsible for the Application of Science and Technology to Development (CASTAFRICA II) for the creation of an African network of institutions concerned with desertification control, one of whose aims would be the pooling and hence the optimization of what is known in this field.

I must repeat that the few examples I have just mentioned are no more than an illustration of what Unesco can help the region and its Member States to achieve and should not confine the imagination of decision-makers. In particular, it goes without saying that part of the Organization's action may involve the general improvement of the scientific and technological standard of a specific university, or the definition of a national strategy for scientific development, all within the context of Unesco's basic mandate in this area.

Strengthening
Africa's
scientific
endogenous
capabilities

At this point it seems essential to recall that all the efforts I have just mentioned concerning research and applied research can only be usefully deployed in an environment that can validly support them. By this I mean that, generally speaking, Africa must embark on a massive effort to strengthen its scientific capabilities so that it ceases to be the weakest link in the chain of scientific and technological progress in the different regions of the world at the close of the twentieth century.

Developing the
scientific
spirit

This brings us back to the comment I made earlier on the need to make education more relevant to development problems. This effort to raise scientific standards in Africa, which I consider desirable and pressing, is only conceivable if scientific and technological content is assigned as from now the prominent position it deserves in curricula, not only at the higher level but also in secondary and primary education. Everyone is convinced, without it always being reflected in practical action, that the tree of science can grow only in rich deep soil. It needs to be planted in primary education, and this has to be borne in mind when undertaking any reform of the education system, a particularly appropriate moment to ensure that the so-called 'basic sciences' are no longer overlooked, as has too often been the case hitherto. There is no shortage of documents and recommendations, even without UNPAAERD, to justify, if that were necessary, the strengthening of Unesco's action in Africa in the sciences. The first of these documents is the Special Programme of Assistance to Africa in Scientific Research and Research and Development, whose principles were adopted at the twenty-third session of the General Conference of Unesco in 1985, thus responding to the request of the Organization of African Unity (OAU). This Programme was favourably received by CASTAFRICA II. Various other, more specific, recommendations of CASTAFRICA II amply demonstrated governments' awareness of the acuteness and urgency of the problems facing the continent as a result of the backwardness that has developed in many scientific and technological fields. Lastly, we can turn to the Brazzaville Declaration on science and technology in Africa, adopted in June 1987 by the First Congress of African Scientists, organized on the initiative of OAU. This Congress also gave rise to the Pan-African Non-Governmental Union for Science and Technology, intended as a federation of African scientific and technological institutions and associations. Unesco will call on the co-operation of this non-governmental

Basic
guidelines

organization, among others, for the implementation of its activities planned in the scientific field.

The major thrust of the work Unesco has to carry out in the scientific field is already outlined in existing documents. What is important therefore is not to fail in carrying out the tasks laid down in them and, under this 'Priority: Africa' programme, to identify among these tasks, at the request of governments, those that are especially urgent.

4. The cultural substratum and the field of communication

For some 15 years now many analysts have acknowledged the central role of culture at the very heart of development issues. In 1975, a decisive step towards the widespread acknowledgement of this fact seemed to have been taken in Africa by the Intergovernmental Conference on Cultural Policies in Africa (AFRICACULT), organized by Unesco in co-operation with OAU. This Conference in fact stated the principle that cultural development is not only the qualitative counterbalance to economic development, but also the key to a real improvement of the quality of life: this is a fundamental principle, which appears at the head of the objectives of the World Decade for Cultural Development.

Unesco stressed this point heavily during the preparatory work for UNPAAERD, just as it emphasized the importance of giving appropriate consideration to the efforts necessary with respect to human resources in any economic development process. Although our lead was followed concerning human resources, as I said earlier, UNPAAERD in contrast does not refer explicitly to the cultural dimension of development, even though it mentions the need for effective participation by people in the process. I believe that it is the task of Unesco to pursue tirelessly its work of persuasion in this connection and to draw attention to what can only be seen as a considerable shortcoming, in my view serious, in UNPAAERD.

I find it really surprising to have to stress yet again what seems to me obvious, namely that disregard of the cultural dimension of development - and this happens only too often - means attempting to advance towards development while omitting one of its basic purposes, i.e. individual and collective fulfilment. Individuals and groups concerned by development activities feel, and are, involved in them only if an appeal is made to cultural motivations (promotion of national languages, defence of cultural identity). Consideration should thus be given to specific local features, attitudes and the view of the world held by the people concerned. Development, we now know, only acquires real meaning and effectiveness if its principle is endogenous, even if the international community can and must contribute necessary support to the projects implemented in developing countries, in Africa as

Where does culture come in UNPAAERD?

elsewhere. Africans understood this so clearly that they made it the sine qua non of UNPAAERD.

We all know that these basic principles have certainly not always been put into practice. Very often development projects still do not correspond to people's real needs because the initial analysis was made without the interested parties being involved either in the definition of their own needs, drawing on their experience and wishes, or in the design and implementation of these projects.

Culture in
national
development
plans

This situation has its roots in the strategies drawn up, where provision ought to be made for genuine co-ordination between the administrative and institutional bodies responsible for cultural development and the various development sectors, the media, planning bodies, etc., together with provision for continuity of efforts based on both the definition of needs and priorities and the planning of activities. Lastly, administrative and institutional models are often poorly adapted to real needs and current problems. This no doubt stems from the fact that cultural policies and development policies have usually been drawn up separately.

Nevertheless, a certain change can be observed in this respect among economic decision-makers. People are starting to realize that an economic development project can produce cultural benefits. A successful irrigation project, for example, can bring about a change in attitudes, or provide free time which can be used to improve the quality of life. Conversely, it is recognized that cultural projects may, in turn, free creative forces that can have an impact on the success of economic activities.

This trend is also reflected at the level of arrangements for political, economic and technical co-operation. Thus the Lomé III Convention, which links the European Economic Community and the associated countries of Africa, the Caribbean and the Pacific (including 42 African countries), envisages the systematic consideration of the cultural dimension of economic development projects and devotes a special section to cultural and social co-operation. For its part, the Organization of African Unity sought the inclusion of a 'cultural component' in the Lagos Plan of Action and the conclusions of work carried out in this respect provided the inspiration for the Declaration of Heads of State and Government of OAU at their twenty-first summit in 1985. Closer to us and more specifically, an important European source of funds-in-trust told me, and repeated to the UNDP Governing Council, that 75 per cent of the failures noted in the projects financed by it were estimated to be due to a lack of knowledge about the cultural factor during project design.

Bearing all these arguments in mind, I think that, in the context of its contribution to the implementation of the

United Nations Programme of Action for African Economic Recovery and Development, Unesco must be ready, under the next Programme and Budget whose draft will be submitted to the General Conference at its twenty-fifth session:

(1) to continue to stress to all the authorities concerned with the implementation of this programme that there can be no lasting economic progress unless the cultural factors of the development process are taken into account;

(2) to accord priority to Africa in the implementation of subsections VI.1.2 and III.3.3 of the next regular programme, devoted precisely to the cultural dimensions of development;

(3) to ensure that any development project, in whatever sphere of activity, continued or undertaken by the Organization, especially in Africa, shall be reviewed or re-examined in the light of the concepts and indicators formulated by Unesco, in collaboration with the governments concerned, to check that the cultural component has been included both in objectives and in the forms of implementation;

(4) to pursue and develop the promotion of African languages and to highlight their role in endogenous development; and, from the same standpoint, to give a new focus to tourist provision and cultural exchanges so as to make non-Africans more aware of the cultural richness of the countries they visit and Africans more conscious of the originality of their own cultural identity.

I am in a position to ensure that these four measures, which basically depend on my decision, will be taken with all the necessary energy and continuity.

If the aim is to ensure active public participation in the development process as UNPAAERD specifies, it is also Unesco's responsibility to highlight the importance of placing appropriate emphasis on communication between the different groups of which the public is composed, who constitute the essential means of development. In fact, although UNPAAERD very rightly mentions the problem of the transport of goods and the means of communication such transport requires, it omits any reference to the communication among people of messages, knowledge and information.

Yet if the active participation of ordinary people, most of whom live in often isolated rural areas, is to be meaningful, these people have to be consulted and involved in the formulation of the model of society designed for them, through the provision of means to express their needs and wishes. The media can thus help to create lively and harmonious interaction between administrative authorities sufficiently aware of the people's concerns and those under their responsibility.

Even so, the media must have available the appropriate human and material resources. Yet in Africa, even if much has been done since 1960, a year in which most African States came into being, a huge effort is still needed so that this continent ceases to be the one where there is the greatest shortage of news media but where at the same time the media would perhaps be the most essential component in the struggle for development. Unesco is working in this direction, particularly in the context of projects under the International Programme for the Development of Communication (IPDC) and with funds-in-trust, and is already collaborating with States and subregions in setting up the necessary infrastructure. Governments may turn to Unesco as the Organization that for decades has wanted communication to serve development and has managed to achieve its aim. In this respect, not only radio, television and the press have to be developed but also news agencies and the means and content of communication.

The media as a
tool for
participating
in development

I shall confine myself, as an example, to mentioning three areas among many others in which governments could profitably request Unesco's collaboration. The first concerns rural educational broadcasting, particularly in local languages, which is especially effective while illiteracy prevails and is spreading in virtually all countries, with various applications geared to the specific needs of the rural population. A Unesco activity in this area can and must be designed in collaboration with FAO's agricultural extension activities, with WHO's activities concerned with hygiene and health and with UNEP regarding the environment.

On the other hand, the rural press, already developed in various places with the collaboration of Unesco, still has considerable potential for expansion. The rural press, the first, and often only, source of reading in local languages and an aid to training and two-way information enabling rural populations and decision-making centres to establish a dialogue, is now far more than 'reading material for the newly literate', the initial objective of its promoters. The rural press currently includes some 60 publications throughout sub-Saharan Africa. Its potential is therefore huge, as it should develop taking account of the complementarity desirable between the rural press and radio programmes for rural populations.

The third example is that of the news agencies required by the African Member States in order to set up and develop the networks for gathering and circulating information. This involves the training of the personnel needed to operate these agencies (journalists, technicians, documentalists, administrators, etc.). After the auspicious launching of the Pan-African News Agency (PANA), Unesco is now implementing subregional projects with the countries concerned. The projects could already, or soon, provide the foundation for or strengthen existing or future national news agencies. The final objective is to provide Africa with an effective, complete and

well-knit network of intercommunity news agencies, to be achieved through three projects for news agency development: one in West Africa (WANAD), one in South-East Africa (SEANAD) and shortly one in Central Africa (CANAD). The projects stress the training of journalists in such areas as economics, health, rural development, environment, science and international relations.

In fact, all the action that Unesco could undertake on communication under this priority programme at the request of the region's Member States must contribute to giving a voice to the men and women of Africa who at present have none. They, after all, are the ones first concerned in the development of their countries.

The projects with which Unesco could help in this respect could include a component for equipping the editorial offices of radio and television stations and news agencies, and particularly for providing both general and scientific and technical documentation (dictionaries, encyclopedias, histories, statistical compendiums, reference books, model libraries, reports from international bodies, Unesco publications and material from other agencies in the United Nations system, links with data banks, etc.), so that journalists would have within arm's reach some of the most essential tools of their trade.

5. Apartheid

The 'Priority: Africa' programme is intended - as I mentioned in the foreword - for all Member States of the Organization of African Unity and the major lines of the programme were laid down with them in mind. One of these States however - Namibia - will have to cope with urgent institutional requirements and the pressing need to train personnel in all fields and at all levels following its attainment of genuine independence. It goes without saying that under these circumstances, Namibia as a whole will be accorded priority by Unesco within its spheres of competence. The Organization will also continue its assistance to the refugees and liberation movements in the 'front-line' African countries. Lastly, there is no need to repeat that it will continue its action to demonstrate that an enslaved people can never achieve genuine development and that apartheid, a political sore and the shame of humanity, also constitutes a curb on the economic and social development of the African populations concerned.

Federico Mayor
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