



HUMAN RESOURCES IN AFRICA

(Trends and Issues in African Education)

Foreword

This is the first volume of Education of a Series of Monographs on Human Resources in Africa concentrating on Trends and Issues in African Education. The contributions in this volume are papers by staff of the Public Administration Management and Manpower Division of the Economic Commission for Africa.

The first article focuses attention on the relationship between manpower Planning and educational planning in African countries. It looks at manpower planning as a rudder for efficiency in human resources utilization; how planning can be used for the development of skills needed for socio-economic development and finally it examines the relationship between manpower planning and educational planning. The second article examines the link between education and politics in Africa; how education comes into politics; how politicians have used education for political ends; and ends by looking at the need for political education in Africa to-day. The third article focuses attention on reforming African curriculum to meet national needs. It argues that reforms in African curriculum must come from within and must be spearheaded by Africans.

These are but a few of the many issues reflected in the articles of this first monographs on education. It is hoped that they will provoke some thinking and comments by our readers who may wish to contact us at this address:

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CHAPTER I

THE NEED TO STRENGTHEN THE RELATIONSHIP BETWEEN MANPOWER PLANNING AND
EDUCATIONAL PLANNING IN AFRICAN COUNTRIES

I. Introduction

Manpower planning is an art which uses a number of mathematical, scientific and statistical techniques to forecast the needs in manpower for all types of production activities within a given economy. It is on the basis of findings made during the course of planning manpower, that a clear idea is obtained of the likely supply and demand situations in respect of all types and categories of skills. These findings are then presented to educational policy and decision makers for necessary follow-up through the development of curricula and appropriate courses which would respond to the identified needs in manpower for economic development.

Thus whereas manpower planning performs a diagnostic and a prescriptive function, its effectiveness can only be guaranteed if action is implemented within a different system: the educational system, whose role becomes an executive one. The two functions are interrelated and rely upon each other for full effectiveness.

It goes without saying that for any system to attain maximum effectiveness, there is need for sound planning practices to operate within it. Therefore a good educational system which will respond to the present and future needs of society, would have to develop a good planning mechanism. In a way therefore, the results to be gained from manpower planning would depend on the effectiveness of educational planning.

In Africa, the linkage between manpower planning and educational planning has yet to be established. Most African countries continue to operate an educational system which was designed for needs of a by-gone era and which cannot fully respond to present-day requirements for economic growth and socio-economic development. Consequently, whereas there exist within the continent critical and growing shortages of skills in key areas of economic production, the educational system churns out into African economies a large number of people equipped with skills that cannot be used to eliminate these shortages. The result is the worsening problems of educated unemployment, underemployment, the brain drain, dependence on foreign expertise, poverty, crime, etc.

Had manpower and educational planning been fully developed within African planning systems, they may have been able to contribute towards minimizing some of these unwholesome effects of poor planning.

This paper will examine some of the benefits that educational planning can derive from manpower planning, and the way the two processes can be mutually reinforcing and guarantee real contributions to economic growth and socio-economic development in Africa.

II. Planning for the Elimination of Educational Unemployment

Manpower planning can be seen as the rudder for efficiency in human resources utilization. Through it, policy and decision makers are provided with early warning signals on future skill needs of the economy, including the types and quantities of skills which would be required at some future date to operate the economy. It also provides an indication of future changes in the pattern of production which may cause

imbalance between the demand for and the supply of skills and which, if not addressed through timely interventions within education and training systems, would result in high levels of educated unemployment, high vacancy rates or the need to import large numbers of skills into the economy.

In Africa, the ineffectiveness or inadequacy of the manpower planning, effort has resulted in the emergence of all three problems. Open unemployment of the educated (i.e. those with no less than six years of schooling) was estimated at over 3 million persons in 1983. Vacancy rates in the public service are as high as 40% and over in some countries and the dependence on expatriates to provide the skills needed in African socio-economic development activities has deepened. ^{1/}

However, this situation cannot be blamed entirely on the inadequacies of manpower planning; in fact, a good part of the problem is caused by the dysfunctional relationship between educational curricula and skill needs of the economy a situation that could have been corrected through sound educational planning and curriculum development.

What is the evidence?

In Africa, the educated unemployed are mainly graduates of the primary school. By virtue of the size of the rural sector in African countries, and the discrimination against that sector in respect of resource allocations to education, most of the primary school leavers come from the rural areas. With facilities and opportunities for education being generally better in urban areas, a greater percentage of graduates from urban primary schools are likely to continue to higher levels of schooling. Therefore new labour force entrants from the African primary school system would consist mainly of the rural youth. The type of education provided at the primary school is so biased away from needs for economic productivity in the rural areas that it has become logical for the rural primary school graduate to migrate to urban areas in search of employment. But because the type of education he has received has been so general and basic, he is not equipped with the skills that can be readily employable in a modernizing economy with more complex methods of production and greater need for specialized middle and high-level types of skills. As stated earlier, close to 3 million of these primary school graduates are currently openly unemployed in African countries.

The situation with regard to unemployment of secondary school graduates is for the moment not as alarming as it is for their primary school counterparts. This is so mainly because secondary level enrolment is much smaller than the primary, and consequently, output from secondary schools is much less than from primary schools. But another reason for this is that secondary school graduates possess a much broader educational base which can be built upon, through training, to provide those skills being sought by employers. Thus, their chances of finding employment even as trainees, are much higher than are the chances of primary school graduates.

^{1/} ECA Estimates, 1983.

For the moment, university graduate unemployment is negligible. However, the absolute numbers of university graduates who stay unemployed for long periods after graduation is increasing and the period of job search is getting longer. This situation affects graduates in the liberal arts and humanities more so than it does those from faculties of science and engineering. The reason for this is that as management, liberal arts, teaching and administrative occupations become saturated, there is a diminishing demand for employment in these categories. Conversely, the pace and direction of economic growth is such, that there is a great and fastly rising demand for people with scientific, technical and engineering skills in Africa.

A persistent and growing problem of educated unemployment is in part, a consequence of poor planning and poor investment policies. Manpower planning would identify the future demand for and supply of workers and skills within the economy and educational planning in conjunction with curriculum development should thereafter take over to plan enrolment levels, courses and curricula with a view to meeting the anticipated targets set in the manpower plan. Such a process, if effective, should minimize the incidence of educated unemployment by ensuring that the skills that will be demanded would be those that would be released into the economy at the appropriate time. Obviously, such a set-up can only work within the framework of a conscious policy of investment and employment generation.

The educational planner should thus be more cognizant of the need to plan with the objective of avoiding the production of unemployable skills; and, depending on the degree of accuracy of the manpower projections and forecasts provided to him by the manpower planner, should, if he in turn works with efficiency, be able to attain his objective with a large measure of success.

III. Planning for the development of relevant skills

African economies suffer from a general shortage of middle and high level skilled manpower. The main categories in which manpower shortages are acute are in engineering and technical, managerial and scientific fields. Occupations within these categories are vital in industry, the services and governments. They are prepared for release into the economy, by third-level educational institutions such as technical colleges, polytechnics and universities.

In Africa, the structure of enrolment in third level educational institutions is such as to make it difficult for these types of manpower to be produced by these institutions in sufficient quantities. For example, twenty-seven African countries surveyed in 1980 ^{1/} had a total third-level educational enrolment of 703218 students. Of that number, 60.7% were in liberal arts and the humanities, 18.4% in the natural, medical and physical sciences, 10.7% in engineering and related disciplines, and only 8.1% in agriculture, forestry and fishing. Although Africa's hopes for development are pinned on her developing abundant agricultural and mineral resources and strengthening her capacities for industrialization, third-level educational institutions throughout the continent have been unable to develop the types of programmes that would respond realistically to this need.

^{1/} UNESCO* Statistical Yearbook, Paris, 1980, Table 5.4

The problem is two fold:

Firstly, there is the inadequacy of resources to launch massive programmes in the sciences, technology and engineering fields; teachers and instructors, equipment and teaching materials, laboratories, etc., are in short supply. Secondly the students available for acceptance in university and other third level educational institutions lack the base for further education in these fields.

A Nigerian educationist observed that "the secondary school graduates, anxious to proceed to the higher institutions, are usually larger in number than those that can make the grade. Many are inadequately prepared and some are unguided in their choice, and consequently fail to pass the necessary academic attainment tests. Owing to the restricted range of offerings in the secondary schools, they cannot be channelled into the disciplines in which the community suffers severe shortages of high level manpower and they tend to flock into the liberal arts disciplines..... The numbers coming out of secondary schools are large enough, but owing to the facilities available in those schools, they cannot secure admission into these faculties on which socio-economic development largely depends."^{1/}

These are problems that are beyond the control of third level educational institutions, but whose effects, not only on the efficiency and functionality of those institutions themselves, but also on the performance of the economy, can be adverse. Solutions to these problems are to be found elsewhere: within the secondary school itself and on the desks of the educational planner and the curriculum developer. Planning the type and amount of resources to be allocated for secondary education as well as the weighting to be given to the different course offerings can be of tremendous importance to the eventual availability of skills that are needed and that have relevance to socio-economic development activities. That task rests squarely on the shoulders of the educational planner.

IV. Educational Planning and Policy Options for Socio-economic Development

The type of manpower operating within any given economy and the skills composition of the workforce depend on the type of activities performed within that economy. The intensity of these economic activities and their share in GDP are determined, in large measure, by the types of priorities accorded to them by Government and the fiscal and other kinds of support available. The ordering of priorities and the allocation of resources to production activities are guided by a number of variables such as availability of capital and raw materials, size of market, profitability and also manpower. The inadequacy of any one of these may by itself determine the feasibility of any public or private investment in a given development project. In Africa, one of the biggest constraints to development is the inadequacy of skilled manpower. In most cases, decisions have been made on investments on large development projects without adequate consultations with educational and manpower planners. Also, very frequently, the skills needed to operate these projects have been imported at very high costs to the project, thus inflating investment and consequently diminishing the social and economic returns.

^{1/} Awokoya, S.O.: "The Role of Second Level Education and its Relation to Third Level Education in Conditions of Dynamic Socio-economic Change in Africa". Paper presented to the Conference of Vice Chancellors/Rectors of Institutions of Higher Learning in Africa, Addis Ababa, 1982.

Consultations with the manpower planner during the project planning phase would guide decisions on the feasibility of project development by revealing the number and type of middle and high level manpower available locally to operate in the project and the manpower cost component in the project budget, taking all options - including importing from abroad - into careful consideration. In case it is discovered that the skills required would not be available at the time they would be needed, then further consultations are called for between the manpower and the educational planners. The latter will then decide whether or not it is possible to produce those skills locally, at what cost and in what space of time. The findings from the educational and the manpower planner are then passed on to the project planners who would add them to the other variables being considered to arrive at a rational decision on project implementation. Should they decide to produce the manpower locally, then the educational planner goes to work to plan the procurement of resources, equipment, instructional materials and staff recruitment so that the target are met and the manpower required produced in time for the project.

It can be seen that the roles of the educational and the manpower planners are not only complementary but also extend to cover all areas of economic activity as long as human resources remain a vital input to economic production and productivity.

V. Summary Conclusion

The effort to strengthen human resources planning capabilities in African countries still suffers considerable neglect. In consequence, African human resources have not been utilized to the optimum to guarantee a high level of productivity. For as long as this situation persists, the continent will continue to face difficult problems of skill/job-requirements mismatches which will aggravate the problem of educated unemployment, high vacancy rates in establishments of production, the services and government, and high rates of expatriate employment.

Planning the utilization of human resources cannot be effective if confined to manpower planning above, for unless equal attention is paid to the educational planning function, the effort to make manpower planning effective would be wasted.

Manpower planning and educational planning are complementary in their objectives and mutually reinforcing in their results. They are inseparable like the two sides of a coin.

CHAPTER 2

EDUCATION AND POLITICS IN AFRICA

I. Introduction

The beauty of Africa lies in its complexity, diversity and heterogeneity. African countries are not a homogeneous group, and although they may share a common experience and a common heritage, they have considerable differences of size, from the giant Republics of Sudan and Zaire to the small Republics of Djibouti and the Gambia; of population: from densely populated Rwanda and Burundi to sparsely populated Botswana; of wealth: from oil-rich Libya, Gabon and Nigeria to the poor agricultural countries of Upper Volta and Chad; of natural resources from mineral rich Botswana, Zaire and Zimbabwe to bare Djibouti; of political ideologies: from socialist Ethiopia, capitalist Kenya to the Kingdom of Swaziland; and of cultures and social organizations: from the Pygmies of Zaire, Bedouins of North Africa to the Fulanis of Senegal. All these differences and complexities are rooted in a long history, tradition and a disturbing colonial experience.

While these differences, diversity, complexity and heterogeneity exist, African countries also share common characteristics which are part and parcel of the African scene viz.:

- (a) the low pace of development and in particular, industrialization. The greatest number of least developed countries are in Africa; in fact twenty six of the fifty independent African countries were listed as least developed in 1983.
- (b) Almost all African countries are basically agricultural with at least ninety percent of the population living in rural areas and most of them having their livelihood from agriculture.
- (c) the existence of a dual economy in most African countries where a small modern, industrialized sector operates within a dominant subsistent and traditional sector. The population continues to pace between subsistence living and modern life and imported life styles.
- (d) the existence of divergent cultures, perhaps consequent upon a colonial and traditional heritage. There are a wide range of culturally differing groups of people, each with its own language or dialect; its own moral and aesthetic values, religious beliefs; distinctive clusters of social institutions, customs and codes of behaviour; differences in the modes of production, in the levels and kinds of technology being used, in the numerical strengths of some groups over the others and hence the dominance of some tribes over others either in politics, in government or in business. Efforts are thus being made to reconcile the divergent groups and harmonize various cultures for national building and development.

- (e) change is happening too quickly and too often in African countries with or without planning with the consequences of serious tension and strain on society. Much of this unplanned and uncontrolled change, in many cases consequent upon coup d'etats, is not acceptable to African societies. Very little of that change is for the better.
- (f) the existence of vast mineral and natural resources which continue to be unexplored and unexploited consequent upon the lack of skilled human resources and capital and the low level of technology for exploration and exploitation of same, and
- (g) the ever-increasing dependence by African countries on developed countries for finance, human resources, food and clothing and for manufactured and industrial products. In spite of the vast available land, African countries continue to import huge quantities of food to feed their people. Agro-forest products remain untapped and the vast hydro-electric potentials of African rivers remain unexploited; let alone using them for irrigation.

These characteristics are a function of facts about Africa and they tend to reinforce Adam Curle's concept of development that it is the "creation of society in which certain conditions prevail for human beings viz.: safety, in that the society is generally non-violent and that individuals are protected from victimization by the state; sufficiency, in that they have enough food, clothing and other material things so that they are not prevented from making full use of their potential; satisfaction in that their lives are generally pleasant without cultural disruption and disturbance; and stimulus in that the people are kept aware of their intellectual emotional, social or spiritual potentiality and encouraged to fulfil it."^{1/} If real development is to take place and not mere illusions of progress and some empty words of modernization, then the outcomes of both political and educational development must aim at serving the goals of safety, sufficiency, satisfaction and stimulus. There is thus the complementarity of political and educational development.

As an institution, however, education is acted upon by other factors operating in any society. What education is, and what it does, is not determined by the teachers or educators, but by many other participants in the educative process viz.: individuals themselves, groups, politicians, planners, economists, pupils, parents, the community etc. and perhaps the most influential in this respect are the politicians whose actions have serious consequences on education. It is this complementarity that makes us examine the relationship between education and politics in Africa. This paper therefore attempts to look at the philosophy of schooling as a first step towards developing that relationship, analyse the politics and economics of education and see how education and politics affect/influence national development.

^{1/} Curle, Adam - Education for Liberation, London, Tavistock, 1973
pp. 118-119.

II. Philosophy of Schooling

The American Journal of Sociology defined schooling as "that somewhat restricted part of education which is given by professional educators to those who come under their tutelage in organized institutions of learning, distinguishing formal from non-formal education in terms of its outward characteristics rather than basic function." ^{1/} From this definition, it can be seen that the difference between traditional and modern schooling is not so much a matter of structures and methodologies but of purpose, and the perceptions of the functions of schooling. Thus from the traditional and modern perceptions of schooling, one can distinguish three functions of the school:

- (a) it should reflect the society it serves and convey to the rising generations the accumulated values and mission of that society, This is a socializing function of the modern school which is not different from that of the traditional pattern of informal education. Today this is regarded as a conservative function of the school. It does not therefore meet the enthusiasm of many nations.
- (b) School should be an instrument for purposively initiating, controlling and directing change in society. Many societies have seen and used education as the main lever for bringing about change and perhaps this is so because through education, people are able to apply productively information, values, skills, knowledge and attitudes previously learnt. In this way, the application of knowledge, skills and attitudes are central to development. This is an innovative function of the school.
- (c) Then there is the liberative function of the school which is concerned with freeing individuals from their cultural and intellectual blinkers, enabling them to think logically and independently to identify and solve problems; to take responsibility for initiating change without unnecessary limitations on self development.

These three functions underscore the point that formal schooling is essentially a supplement to patterns of informal education in the home and the community. Formal schooling does not replace traditional or informal education even though some of their functions are similar. There is no doubt that education received from parents or the community is of vital importance to a child's development because, as the wise saying goes, "as the child is raised, so will he be" or as "as the twig is bent, so grows the tree" ^{2/} We shall therefore examine in detail the traditional and modern roles played by the school and their effect and influence on the community.

^{1/} Malinowski B. in American Journal of Sociology Vol.48(1943) p.649.

^{2/} African saying

(a) Traditional Education

Education is not just what is learned by pupils and students in schools, colleges and universities, but includes all that plus what they learned before and after finishing school, that is, both formal and non-formal education. Before the colonial era, education was mainly informal, but it was certainly not haphazard nor was it casual. It involved all the vigours of schooling in that it was used as an instrument for:

- (i) promoting social stability and continuity;
- (ii) communicating the values, skills and knowledge possessed by the adult members of a culture or society and;
- (iii) being used as a means for incorporating an individual into a society possessing a common consensus of beliefs and preparing him for roles assigned to him by society.

Through the process of learning by living and doing, traditional education equipped the young with communal responsibilities by equipping him not only with knowledge and skills for productive use but also for socialization. In all these cases, the family and the community played the very important roles of an educator and these roles continue to be played to day since modern education can only do part of the educative functions of the family and the community.

In traditional societies, the development of education as a specialist activity was greatly affected by the degree of stratification of the said society. The nature and amount of education an individual received was a function of:

- (i) the degree of stratification;
- (ii) the roles to be played by individuals in adult life and;
- (iii) the relative importance of ascription and achievement in the distribution of adult roles.

A highly stratified society therefore could produce sedentary farmers, pastoralists, warriors, religious leaders, teachers, bureaucrats, craftsmen, traders and nobles whereas an acephalous society had their social and political life based on kinship and descent. Roles in this latter society were distributed on the basis of age, sex; personal characteristics and achievement. An individual who excelled in physical strength, in warfare, in agricultural production or in public speaking could therefore become a leader or a chief. Leadership was competitive rather than given on account of status or birth.

During the colonial era, African social structures were radically changed. Traditional rulers and chiefs lost their powers and authority as Colonial administrators assumed greater authority and control and secondly countries which were colonized early had a headstart in the development of economic infrastructure, urban grouping, cash crop farming, industrialization etc. During that period, missionary education could be looked at as being altruistic i.e. bringing enlightenment, literacy, skills and knowledge

and better health to the masses of the African people. On the other hand, missionaries were consciously or unconsciously, the agents of an oppressive and exploitative foreign presence, deliberately alienating Africans from their traditional cultures and beliefs by imposing inappropriate values, school curricula, ambitions and expectations on unwilling and powerless people. There are ample facts to support or refute both cases. What cannot be disputed, however, is that Western Education was a radical force for change in a direction and to a degree that neither missions nor colonial administrators could possibly have foreseen. Indeed modern education was the yeast in the loaf of political unity; the catalyst that activated political struggles, and the force behind nation building and national development. Given this situation, we will now examine in some detail aspects of modern education.

(b) Modern Education

Education in the modern sense was introduced in Africa by foreign missionaries or by an indigenous government with a colonial approach to its peasantry. The first economic effect of that education was to siphon off a few of the brightest pupils into clerical and other white collar employment; and in so doing it created an elite which was widely separated in aspirations from the stock of its origin. Today the separation continues in so far as it is greatly intensified by the ethos of personal achievement and of competitive materialism.

A second aspect of modern education is that most African parents look at school as a means of escape for their children from the misery, the hardships, the privations and ignorance of rural life. They look at school as the only hope of escape from rural and subsistence living to a new life beyond the local environment by getting a paid job. It has therefore been argued that a deliberate attempt to keep peasant children in rural areas is but an affront on their hopes and ambitions of those pupils aspiring for a post in the civil service and an escape from rural life. According to some people, this is further enhanced by the fact that current mould of education encourages white collar mentality and contempt for manual labour and hence the profound cleavage between educated elites and the masses, a drift to the towns and cities, a loosening of moral standards and other things valued in society. They argue that since schools are alien instruments torn from their Western context and set down in societies to which they are unrelated, their activities are theoretical in nature, their programmes a matter of vicarious experience through such media as teacher-talk and book; they are teacher-centred instead of child-centred, with little local experience and defficient in equipping pupils/students with necessary skills, knowledge and attitudes; they are highly competitive; examination and paper oriented in their outputs and an expensive institution to maintain.

Modern schools may still be charged of having failed to perform socializing functions because, despite what has been said about their similarity in some respects to more formal elements in traditional practice and schooling, they essentially embody a new and different culture and as such, they are therefore ill-adapted to conveying the local culture. Secondly, schools imposed a new national framework upon local communities and societies which were largely based upon very different values and practices so that the main socialization role of the school lay in terms of the modern national society and the modern sector.

While the foregoing may be so, schools have very much become an integral and living part of the African societies they serve. Their distinctive problems derive not from their imported character only, but also from Africa's failure to make them more relevant and to root them more firmly in the culture of the society and to produce an Africa school both in character and content, which is capable of

preparing the young for their modernizing role without divorcing them from their African culture. There is no doubt that the modern school has been readily absorbed by African societies and is being utilized by individuals making up the societies for their own purposes. Since it has become an African institution, its characteristic features and functions are firmly rooted in local African context, deriving their strengths not simply from foreign traditions but from the perception of local people as to their needs and to the capacity of schools to meet their local or national needs. It is therefore up to African educationists and educators and decision makers to analyse their own situations and to recognize the fact that in the eyes of African communities, schools, far from being failures, have been quite successful in:

- (i) serving as an instrument for promoting and controlling change;
- (ii) transmitting new national values and new economic and other skills and knowledge not necessarily possessed or acquired by adults through traditional education;
- (iii) being used as a means for incorporating the young into a rapidly changing national society with pluralistic patterns of belief, and being able to fend for themselves and contend with social changes, i.e. it is helping to prepare the young for a life in their own communities and to fit them for new roles in national spheres. With this in mind, we can examine the relationship between the school and the community.

(c) Community and the School

There is a lot of literature written about ways of linking the school to the community and one such way has been to increase the relevance of education provided to the young through environmentally related curriculum. The reason for this has been that the traditional imported curricula has tended to interpose a cultural barrier between the young and the community in which they live so that upon completion of their education, they have not been able to integrate fully in the community.

In view of this, great efforts have been made to try and make the curricula more relevant to community's needs, thereby integrating the school with community activities. The Entebbe Mathematics Programme, the African Primary Science Programme, and the African Social Studies Programme were, and have been such attempts at school-community integration. More appropriately have been the establishment of community schools evolving on such models as the Kwamsisi model in Tanzania with emphasis on literacy, numeracy, citizenship, self-help and cultural activities and on environmental studies. Others like the new school concept in Benin offers instrumental disciplines including social and environmental studies, as well as numeracy and literacy. One of the major problems in these community oriented schools has been that of assessing the expected outcomes of such systems and programmes. Traditional examinations have continued to be administered with such rigidity and formalism which continue to permeate the very spirit of educational systems and take little account of the values, experiences, knowledge and skills gained by the pupils for effective utilization in the community in which they live. Indeed most African countries use a single assessment instrument, i.e. the traditional examinations at the end of primary and secondary education to assess the outcomes of pupils' learning.

Considering the fact that most people in Africa have little formal schooling and at best the fortunate spend twelve or sixteen years in formal schooling, efforts should be made to involve the community more effectively in the activities of the school so that it operates as the school of the community and not merely a school for the community. To do this African states need to increase the direct involvement of the local people in the work of the school using local people as resource personnel, as managers, as career counsellors and as financiers. The harambee schools in Kenya are one example of such community involvement and so are schools in Guinea called the "Pouvoirs Revolutionnaires Locales", which have the responsibility of planning building operations, organizing school production and supervising instruction. Perhaps what is most important is the education of local people in the management of modern schools. Local communities will not necessarily take up power and responsibility of managing schools unless they have been given the right education to do so.

Conversely the school can serve the community directly by meeting the learning needs of that community. In a number of countries, schools have been involved in the development activities of that community. For instance, in Malawi the youth week development activities have played a vital role in the mobilization of the youth for socio-economic development.

What Africa needs therefore is to develop a teacher into a new type of educator as a community leader, an "animateur" who is able to establish direct links with the community and social groups, provide career guidance and information and be able to promote scientific approach to life even in rural areas. Upper Volta appears to have started on the right note in as far as the village teacher at a Rural Education Centre supervises and carries instruction, manages a profitable school farm, acts as a local animateur and liaises with village leaders. On the other hand, Bunumbu in Sierra Leone a community teachers college has been engaged in developing a rurally oriented primary school curriculum; transforming some schools into community centres and training a new cadre of community teachers to staff these community centres.

These efforts to develop the modern school as a microcosm of the external community and as a functioning part of that wider community has involved the orientation of curricula to the needs of the community and to involving the school in the activities of the community and by so doing linking the school directly to the community.

This community-school relationship has brought in its own problems, its own ethics, its joys and sorrows, its politics both local and national and in the final analysis, schooling has become a major national concern both politically and economically.

III. The Politics of Education

As a science, African politics pays little attention to constitutional principles, to party politics and to public opinion. As an art, it is intriguing, scaring, but calls for a lot of courage. Participants in the game play it to suit their interests and to their own advantage, and in the final analysis, most of them have not hesitated to use education as a political weapon. Indeed if education is a basic human right, whose function is to develop the talents of individuals to the fullest extent possible so that they are able to participate freely within a free society, African countries should recognize it as fundamental lever for social change, as the yeast in the loaf of political unity and as a major factor of national development. Schools therefore have been used not only for inculcating attitudes and basic values (such as honesty, truth, self discipline etc.) but for indoctrinating individuals with party political creeds, political ideologies and for moulding them into specific casts or individuals.

As an integral part of the total social structure, educational systems tend to reinforce national structures and to buttress what exists, even if these structure are inefficient and in need of change. Indeed modern schools have been used as principal instruments for society's overall integration and for socializing the products of the system in accordance with societal norms. As Michael Manley once pointed out, "education is always an extension of political purpose and must be seen as the primary, perhaps the main, agent that is available to that purpose".^{1/}

In many African countries education is used as a political tool for permeating certain political ideologies, for keeping parties in power and for economic development. Statements have been heard such as: "we shall not hesitate to sacrifice, if it is necessary, the individual for the benefit of the community."^{2/} or "A country like Nigeria cannot allow education to be left to the whims and caprice of individuals choice."^{3/} These are powerful pronouncements which ought to be taken seriously and since education cannot be left to the whims of individual choice, a few basic questions may be asked:

- Who goes to school and why? For how long and when?
- What are the consequences of schooling or non-schooling?
- What are the functions of education to day and whose interest does education serve and how?

^{1/} Manley Michael - Politics, Society and the Total School Keynote Address Report of the 6th Commonwealth Conference, Jamaica, 1974, Commonwealth Secretariat, 1974.

^{2/} Adamalekun L. Sekou Toure's Guinea, London Methuen, 1977.

^{3/} Federal Republic of Nigeria - Second National Development Plan 1970-74 (Lagos, Ministry of Information, 1970, p.135).

It is not easy to answer these questions because they are capable of many answers. To the question who goes to school and why, it may be said that all men have the right of access to educational facilities but since current educational strategy relies heavily upon the structures of conventional formal school to provide learning experiences, the majority of the population in Africa do not have access to formal schooling. Education still remains the privilege of a minority and fails to embrace the whole of society. Education, it must be emphasized "should no longer be seen to be a segregated activity conducted for certain hours in certain places at a certain time of life. It must be by all at all time for all society, any time, any where by any one; irrespective of their political or mental state. In this way formal education should not be restricted to time and place, but should extend to the home, in the street, in the field, through the press and other distance teaching and mass media facilities ^{1/} and all through an individual's entire life.

To the second question of what the consequences of schooling or non-schooling are, we can look at both pre-independence and post-independence education. Before independence, mission or colonial education was either altruistic bringing enlightenment, literacy, knowledge, skills and better health to the masses of African people; or that both missionaries and colonialists were consciously or unconsciously, the agents of an oppressive and exploitative foreign presence, alienating Africans from their traditional culture and beliefs by imposing inappropriate values, school curricula, ambitions and expectations on unwilling and powerless people. There are enough facts to support or refute both cases; but for sure, Western education was a radical force for change in the direction and to a degree that neither missionaries nor colonial administrators could possibly have foreseen. Both missionaries and colonialists benefitted from the presence of each other they all needed literate clerks interpreters church elders and artisans.

Today, modern education continues to serve as an instrument for promoting and controlling change, for transmitting new national values, knowledge and skills and for rendering the individual more efficient to his/her condition of life. The consequences of non-schooling therefore means that the individual would become less efficient in promoting change and hence the high rate of illiteracy is a major factor in hampering socio-economic development in Africa.

And to the third question of what role schools play today, mention has already been made of this in the second part of the paper; suffice it to say that schools continue to recruit and socialize the leadership for national political organizations for administration and management of national affairs and for economic activities. Let us examine in some detail some of these political goals of education.

IV. Political Goals of Education

The politics of education in Africa have encompassed education for national identity, for political participation, for cultural education and for socio-economic development.

^{1/} Chiwona Peter H. in S.O. Awokoya (ed.) - Higher Education and African Development, UNECA, Addis Ababa, 1983.

(a) National Unity

During the colonial era, artificially created frontiers produced large members of subcultures - showing distinctions between Christians and Moslems, and between Western faith and traditional faiths. Other boundaries have been created between modern and traditional sectors and those operating between national/international plane and the masses whose life is essentially on rural/local plane. Education has therefore been used as a major instrument for achieving the goals of national unity, political stability and equality of opportunity and for circumventing situations which often give rise to conflict. Indeed tribal conflicts have been rife in Africa.

Often national governments have encouraged the development of a common national language to ease tension and to facilitate effective political communication and to underpin national administration and economic activity. There have been arguments that education differentials among tribes have led to claims that people from a particular tribe, region or group dominate the public services, higher institutions, strategic positions, political scene etc. Smaller tribes or groups of people have also expressed fears that political democracy without giving education to people would involve larger groups with lower educational standards controlling small tribe/groups but with better educational standards. There is no doubt that educational differentials can create a discordant climate where nationals are not interested in going to work in another district, state or region. No wonder a leading article in West Africa magazine argued that "of all divisions in Nigeria that caused by differing levels of education is the most serious."^{1/}

In spite of the discordant climate that may be created by differing educational levels education continues to be used as a major instrument for moulding national unity, for creating new elites to take the reigns of government, for creating and stimulating national consciousness, for unifying various tribes, subcultures, castes and faiths, for instilling national identity and for fostering national economic integration.

(b) Political Education

Democracy without education is meaningless. At best it breeds dictatorship of the majority over the minority. If people are given democracy they should be given education as well, that is, knowledge, skills and right attitudes for the effective management of national affairs. In Africa, healthy political development and in particular the achievement of stable egalitarian societies is adversely affected by the mal-distribution of education. Intellectuals are subjected to suspicions by politicians for harbouring political ambitions and for their intellectual criticisms of national affairs. They

^{1/} The Politics of UPE, West Africa No.3140 (12 September 1977) p.1854

are therefore the targets of bitter attacks by governments and politicians. It is therefore fair to say that if people are to contribute to national development they should be educated in the art of government i.e. there is need for political education.

Political education does not mean political indoctrination of party political creeds, political ideologies and the rest of it. People ought to know how governments work, what their rights are, their civic responsibilities, their role in national development and their civic duties.

In the changing fortunes of African politics where politicians are not born but made (whatever the method) it is important that political education should be a major subject to all those concerned with educating the entire population. On the African scene, the armed forces have become a major source for the production of African leaders and politicians, and for this reason therefore political education should become an important subject of military curricula. There is no doubt that some form of teaching of political values is good for pupils/students at all levels of the educational system. This may be a healthier thing considering that most of those engaged in Africa politics may not have gone beyond secondary education.

Outside the formal educational system, political participation has reacted phenomenal proportions. Almost every country has been engaged one way or another in mobilizing the masses for political, economic and social development. Such mobilization of the masses including the youth have had remarkable success in Ethiopia, Tanzania, Libya, Malawi, Guinea, Zambia and Zimbabwe to name a few.

(c) Cultural Identity

Within that realm of political education is the need to establish and develop cultural identity and individuality and to enhance the valued aspects of traditional culture. Unless there is a deliberate attempt to inculcate such traditional values, young people tend to reject traditional sanctions and constraints and instead, they developed aggressive and intolerant attitudes to society's norms. Education be it formal, non-formal or traditional, should help pupils discover their cultural identity, help to nourish it and contribute to its growth.

It must be emphasized that in Africa modern societies political philosophies such as Humanism, African Socialism or Marxism in spite of their appeal to tradition have not been effective in weilding traditional cultures. A balance has yet to be struck between what is worthy preserving in African traditions and what can be incorporated from Western traditions into African cultures and also what may be adopted from science and technology for national development.

Many young people are not bothered with traditional cultures. They are more excited with the modernizing process and are attracted by the new and traditional possibilities to which their education has already introduced them. Whatever the goals and aims of education, be they for manpower production or

for self-fulfilment, the school system has tended to produce large numbers of Africans who have not easily accepted the traditional elders authority. They have developed selfish aspirations ill-matched with their levels of education or the intensions of those who had taught them. Hence the charge that African societies tend to be fragile, threatened with destruction and fragmentation and characterized by disorientation, rootlessness, self-seeking individualism and imported life styles.

There are enough facts to refute or support these charges. One can see Africans living imported life styles incompatible with those of the local communities whence they came. Others having studied subjects unrelated to the African situation or with skills of no immediate demand in Africa find themselves jobless or unable to contribute to the development of the region and hence they are forced to go overseas for work or for a better life.

(d) Education and Development

The contribution education makes to economic development varies according to the particular circumstances of a given country, the state of development which the country has reached, the development strategy being pursued and the forms of education being utilized. But as Vaizey pointed out two decades ago, "education may be potent weapon in economic modernization but only if the conditions are right: by itself it probably consumes more resources than it produces."^{1/} Investment in education is costly and takes time to produce returns. Even then there is no guarantee that at the end of an educational ladder, educational returns can be easily produced.

What is evident in Africa is that education is not likely to be a powerful agent of change if all we mean by education is the development of specialized vocational or proto-vocational education in Agriculture in lower level schools. Evidence has showed that skills in themselves are nothing unless they are accompanied by the acquisition of certain attitudes of mind and the ability to comprehend and contend change. The current problem in Africa is one of not just adding to the quantity of factual knowledge, but of changing the quality of thinking through permeating all teaching with the desired attitudes knowledge and skills. And yet many of us are guilty of expecting too much from the school. In Africa the argument continues as to what the real contribution of the school should be while at the same time condemning it for its inadequacy in preparing students, and we have reduced its efficiency by attempting to adapt it to a task for which it is not well suited. We know however that the strength of the school lies essentially in what is termed general education, equipping the young people with tools needed to investigate and enquire, to think, conclude and understand. It is substantially weaker in its capacity to inculcate

^{1/} Vaizey John - The Economics of Ed. (Faber, London 1962) 134.

prescribed attitudes, to train in specific production skills. We also know that education has been more responsive to the needs and demands of the modern sector for high level manpower. Schools have been unable to produce a cadre of enlightened leadership for services in rural communities, and to produce a leaven of men and women with some scientific understanding, simple skills and knowledge for farming, health, nutrition and income generating activities needed in rural areas.

In Africa, rural transformation is necessary to foster growth in other sectors and more so in the modern sector. It is a "necessary prerequisite for rapid economic growth as well as the principal means of creating more productive employment."^{1/} The prosperity of rural areas is dependent upon the maintenance of a balance between farming and other occupations within those areas. Although a number of African countries have tried to devolve industrial development to the rural areas and continue to promote low-technology service industries; rural development like many other forms of national development is extremely complex, with undefined aims and often couched in general and rhetoric language and between goals sought and instruments used.

Experience has shown in Africa that ruralized primary schools, vis-a-vis rural education, are failing to prepare or equip the youth with farming knowledge and skills and for innovative and productive rural life. Instead rural primary schools continue to be inefficient circuitous routes to the main path of general education. Perhaps more so in Africa than elsewhere, formal schooling could be improved by taking into account certain structural characteristics:

- (i) schools are essentially detached institutions physically separate from life and work of the community; they are oriented institutions preparing students for their later lives inevitably devaluing what the pupil can currently put into practice because they are concerned with step by step build-up of understanding and skill towards substantially different future practice. For schools to play the more effective role, they should be more community oriented, be engaged in the communities activities, they should be schools for the community rather than schools of the community. Arising out of schools detachment from the community, African education continues to be steeped in theory and divorced from the realities of African life, vehemently engaged in the quest for certificates and a major cause of rural-urban drift.
- (ii) a second aspect is that immediate action in formal school is largely and properly subordinated to abstract learning and concept building with the aim of looking at long range change. Since learning is more effective by making full use of experience which must be had from local environment, learning in African schools is achieved through various means necessitating the prior and on-going learning of abstract languages, literacy and numeracy. This is compounded by the fact that textbooks used in African countries have sometimes little relevance to the African situation, especially in institutions of higher learning.

V. Conclusion

It should be stressed that there is a general lack of linking economic planning with educational planning, in spite of the fact that educational planning is a necessary concomitant of overall economic planning. The desirability of education

^{1/} F.H. Harbison - The General Employment in Newly Developing Countries in J.R. Sheffield L. Ed. employment and rural development (Nairobi EAP House) 1967, p.185.

planning stems from the realization that the problems of development are largely problems of human development and also from an understanding of how educational systems relate to social structures and patterns of privilege and disadvantage. As an industry, education is growing too fast on the African continent. It is being used increasingly as a major instrument of national development, and because it is too costly it should not be allowed to develop simply through the momentum exerted by social demand. Yet it is this social demand that brings education into national politics, and for Africa the issue is much more serious.

Furthermore both politicians, planners, and policy makers have assumed too readily that the current demand for education can simply be met by expanding the school systems, or by universalization of education, or by its democratization. The problem is much deeper than this. The current weakness and failings of educational systems stem from our inability to introduce radical changes in curricula, teaching methods, policies, administrative structures management of schools and other reforms. These weaknesses and failings cannot be eradicated by simply expanding educational systems. They call for fundamental changes on the part of politicians, educationists and policy makers. It must be emphasized further, that educational development like any development must come from within. It must be endogenous, thought out by all engaged and interested in education. It must spring from the soil on which it exists and it should be atuned to the people's aspirations, to the conditions of their environment, to their culture and to the available resources. In this way education can meaningfully contribute to overall national development, and hence its link with overall socio-economic and political development.

CHAPTER 3
REFORMING AFRICAN SCHOOL CURRICULUM TO MEET NATIONAL
NEEDS: ISSUES AND PROSPECTS

I. INTRODUCTION

The irrelevance of African education in meeting individual and community needs in Africa has become one of the few conclusions on African development issues for which there is little disagreement. In this respect, the unsuitability of the school curriculum to the socio-economic situation of Africa has been constantly identified as a major contribution to this weakness. Unfortunately, Africa's continuous inability to reform the education system in order to strengthen the identified weakness has given rise to a situation whose aggregate impact leads to the perpetuation of African under-development.

Several analysis have been made on the situation, together with its impact on African development, over the last decade or so. Most of the findings have been appropriately discussed in major African and non-African fora. Despite these two significant approaches, nothing positive has been done systematically to bring about the desired reform. This paper contends that though these two approaches are significant, they need to be supplemented by a corresponding analysis of those obstacles which have resulted in this dichotomy.

Perhaps this neglect to provide the supplementary analysis as well as the absence of coordinated action to resolve these obstacles, have been one of the stumbling blocks to the reformation of school curriculum in Africa. The purpose of this paper therefore, is to give a subjective analysis of some of these obstacles with a view to sensitize appropriate authorities in their quest to strike the necessary balance between school curriculum and the socio-economic conditions and needs of Africa.

The analysis is focused on two main issues whose impact have far reaching consequences for structuring school curriculum for national development. First a series of inherent contradictions which result from existing functional disequilibrium between the processes of education planning and development planning are analyzed so as to highlight the need for co-ordination and synchronization of objectives, strategies and programmes as a major pre-condition for instituting curriculum reform. Secondly, issues surrounding the nature, scope and identification of African needs and wants are analyzed in view of the fact that, be it needs or wants, they have to be produced and distributed by human skills which are largely developed within the school system. Following the analysis, and as concluding remarks, several basic elements are identified and suggested as guide-post for consideration by African curriculum reformers in their task.

II. CONTRADICTIONS WITHIN AFRICAN SCHOOL CURRICULUM REFORM PROGRAMME

(a) The Problem

There is general consensus that African educational systems continue to instil knowledge, skills and attitudes unrelated to the requirements of socio-economic growth and development in Africa 1/. The unsuitability of the school curricula for the socio-economic development of the region has been constantly identified as a major contributing factor to this imbalanced structure 2/. Despite the continuous recognition of this unsuitability, very little results have emerged in its reformation. This non-result oriented situation is due to the impact of three factors that we consider as major contradictions within the African curriculum reform programme. These factors which shall be briefly reviewed in this section, centred respectively around (i) the interrelationship between the setting of educational objectives and the formulation of national policies; causing a divergence between nationally set targets and targets accomplished; and (ii) the relationship between syllabus requirements resulting from the reform and the availability of textbooks and instructional materials.

(i) Objective setting and policy formulation

A major problem facing educational reformers in Africa is the lack of an operational system through which appropriate consultations are made and decisions harmonized between education planners and planners of national development needs. In most cases, the exercise is done at two levels and often result into different plan documents with different time interval. Where this is done, there is a traditional tendency for development plans to refer to education requirements and objectives in a general way, leaving out the structure of the school curricula as required to meet the development needs. Similarly, education plans take the orthodox approach of projecting facilities, student enrolment and teachers for a specified period with no detailed consideration given to the production of requisite capabilities to execute those functions that would produce and distribute national needs.

The short-term result of this is the non-coordination of investment, education and training programmes, strategies and activities. Over the long-run, the situation has given rise to the anomaly of a simultaneous existence of critical skill and knowledge shortage on the one hand and a pool of surplus under-utilized educated, skilled and unskilled labour.

1/ ECA; "The Challenge of Education in the Socio-Economic Development of the African Region", Doc.ST/ECA/PAMMD/HRP 17/81, August 1981.

2/ ECA; "Policies and Strategies for the optimal Utilization of Resources For Educational Development", Doc. PAMMD/AAU/ED/3/82, November 1981.

(ii) Reform Requirements and the Availability of Textbooks and Instructional Materials

Another major problem faced by African educational systems with regards curriculum reform is that of filling the gap between the intended or instituted reform and African nations' abilities to provide relevant textbooks and instructional materials. In other words, the continuous talk about the inadequacy of school curriculum in Africa and the urgent need to have it reformed in response to Africa's socio-economic needs, is seriously constrained by the heavy dependence of most African countries on the developed world for the supply of textbooks and instructional materials particularly for higher education and vocational training programmes.

Of consequence are two observations. First, imported textbooks and materials are designed to meet needs of the region in which they have been produced. As shall be pointed out later, conceptual needs are basic to all of mankind but their structure, form and content are in direct response to particular value, culture and geography of a group of people. As such, any direct transplant of theories, concepts and solutions, as contained in imported textbooks, could, to say the least, have adverse effects on the meeting of African short-and medium-term needs. The second observation is that a prerequisite for curriculum reform is the availability of corresponding textbooks and materials. Illustrations, exercises and concepts must reflect the circumstances and constraints within the environment in which graduates will live and work.

Efforts to develop new and provocative school systems and contents in Africa have suffered from the absence of relevant textbooks and instructional materials. This has resulted in a form of contradiction whose removal points to the need for a system that would either ensure appropriate adjustments in imported textbooks for adoptability or would ensure the production of textbooks and materials domestically. This point is not a new revelation. It was well made at the 1981 Conference of Vice Chancellors in Addis Ababa, at which time, appropriate resolutions were adopted for the production of African textbooks. Some efforts have begun in this direction, but like past efforts, they could be caught up in the persistent contradictions posed by the lack of co-ordination and harmonization of activities.

(b) A new approach

A suggestive measure to resolve these two contradictions would be the initiation of a process that will allow for a joint participation of education and development planners curricula reformers and textbook writers when curriculum programmes are being worked out or restructured. Perhaps a new strategy would be for the development and the education plans to cover the same plan periods. The former plan should have as a major focus, the identification of future national needs together with alternative strategy approach in meeting those needs. The later plan should be focused on the identification of required human resources together with mobilization and development strategies to meet the identified needs. The formulation of the first plan, which shall be the basic working document for the second, should elicit participation from village leaders, youth organizations, urban leaders and national policy and decision makers. The second plan, upon which any meaningful curriculum reform programme should be based, should be prepared primarily by development planners, regional planners and education planners.

III. THE DIALECTICS OF NATIONAL NEEDS AND THE ROLE OF EDUCATION IN MEETING THE NEEDS

Many a times reference is made in various ways to the satisfaction of national needs. The Economic Community of West African States (ECOWAS) has expressed the desire to raise the standard of living of the West African peoples. The final Act of Lagos is aimed at the achievement of the same goal for the peoples of Africa. All efforts of the Economic Commission for Africa (ECA) and other regional, sub-regional and national governments are geared towards the same end. Yet two fundamental questions continue to have an impact on the desire to meet these needs. Firstly, have the needs been clearly defined in relation to national conditions, customs, values and wants? And secondly, given that they are defined, are national and regional institutional arrangements and capabilities constituted so as to meet these needs?

The importance of these two questions is reflected not only in the development and execution of national investment plans and programmes, but also in the structuring and restructuring of the content and structure of national manpower development and utilization systems. As such, any attempt to relate school curriculum to the meeting of national needs should incorporate measures for the provision of possible answers to guide the exercise. Pertinent issues embodied within these questions are briefly reviewed in this section.

(a) National Needs Identification in Africa

(1) Present State of Affairs

Although differences may exist between targets set in various national medium term plans in Africa, they all seek to:

1. Create, in the long-run, a unified, strong and self-reliant nation;
2. Localize economic activities through a balanced development approach with a view to reducing poverty, unemployment and under employment;
3. Increase per-capita income and ensure a more and fair distribution of that income; and
4. Intensify the development of specialized manpower within the requirements for a diversified social and economic base.

A quick glance at the above could suggest that Africa's basic needs are indeed well defined since their achievements do provide a concrete base for national development. However, upon closer examination, particularly from the start to the end of the implementation stage, one could be left with the opposite conclusion. This possible element of mis-conception results from the problem of "allocative inefficiency" whereby appropriate decisions are made based on false signals and assumptions.

This in turn leads to a divergence between desired needs, required or actual needs and produced needs. Two interrelated factors give rise to this problem. The first relates to the natural trade-off relationship between wants and needs which makes the process of choice a very difficult one. Secondly, there is what economists have come to call "the demonstration effect" problem manifested in the direct imitation and substitution of non-African needs within an African environment. The combined effect of these two root causes has compounded the education system's inability to generate the required manpower for the production and distribution of African needs. Let us briefly review the impact of this effect.

Within the confines of a perfect decision making process, national wants should logically be the same as national needs. But unfortunately, the world does not have an undistorted decision making process. As it is, conflict exists between individual wants and preferences on the one hand, and societal needs on the other. Experience indicates that the level of the conflict is negatively correlated with the level of awareness and participation of the peoples in the decision making machinery. For example, the lower the rate, the greater are the chances for such conflicts to erupt. This implies then that there is a high probability for such conflict to arise and grow within the African region particularly knowing that (a) as high as 90 percent of the African population reside in rural areas away from decision making centres; (b) nearly 45 per cent of the African population are below age 15 and are therefore excluded from the decision making process; and (c) at least 75 per cent of the African population are illiterates who can not read, comprehend nor follow-up on values, aspirations, systems and taste that are imported by the very few decision makers.

As indicated earlier, a second factor contributing to this conflict is the "demonstration effect" What this means is that investment and consumer decisions makers in Africa have generally adopted an attitude of imitation from the developed world in their basic taste, habits and actions when planning and executing investment and consumption needs. This attitude has led many African countries to show off conspicuously high modern technological production lines, western and/or eastern consumption structure and patterns in exchange for high cost expatriate employment, foreign exchange leakages, unemployment and underdevelopment of domestic human and natural resources. The result is the production of wants as against the production of African needs.

What is of primary concern with regards the education system is what happens after the decisions to satisfy Africa wants rather than needs have been made. To begin with, a large proportion of those wants are non-African oriented and are thus produced relatively cheaper in the developed world. Additionally, the desire to satisfy those wants increases the need for importation and decreases the need to train the relevant African skills to produce those wanted goods and services. The development implications of these two awkward situations are threefold: first, the needed foreign exchange for the provision of national development needs is mis-allocated. Secondly an imbalance is created between present and future skills which ought to be produced and those which ought to be demanded. Finally, the tendency to under-utilize human resources arises given the existing pool of educated unemployed in most African states.

One can see a dilemma faced by the school system as a result of a decision to satisfy wants rather than needs. On the one hand, the wanted goods and services are mostly produced in foreign lands, with foreign technology and by foreign labour. As such it is only natural that the required skills for the production of these goods would be effectively utilized not in the importing region; but in the producing region. Therefore with all other things being equal, any unilateral restructuring of the school curricula to provide the required skills for the production of national wants could in-effect escalate the educated unemployed or the brain drain problem since the effective demand for these skills will be greater in the producing region than in the importing region.

On the other hand, revamping the school curriculum to produce required skills to meet national needs could also lead to the escalation of the educated unemployed problem. As stated earlier, though explicitly enunciated, low priority is generally given to the development and production of nationally needed goods and services. This low priority partially results from low ineffective demand for the associated skills that would have been produced by the revamped school system.

The delinma therefore is that whether the curricula is designed to produce skills to meet national needs or national wants, a situation could develop where the school system produces skills that the economy shall not consume while consuming skills which the schools do not produce. Indeed, this is a structural problem centred around national and individual preferences and for which solutions must be found when decisions are being made regarding the restructuring of the African school curriculum. Otherwise, no matter in which direction the curricula is changed, the African labour market shall continue to be characterized by the presence of educated unemployed due to the resulting mid-match between available skills and required skills. In other words efforts must be made to bridge the present gap between the identification of African wants and African needs as a major exercise towards the reformation of school curricula in Africa.

(b) Components and structure of African Needs

A major argument of the preceeding section is that a starting point in the development or adjustment of any school curricula should be the identification of national needs. Therefore in considering the reformation of African school curriculum, African needs must be clearly identified. A crucial question then arises: what are African needs?

A hasty answer would be to list food, shelter, health, clothing, energy, transport, communication and education as constituents of African needs. As they are, these needs are not unique to Africa for they are the essential needs of mankind in general. This observation could easily lead one to the conclusion that African needs are identical with non-African needs which could be true or false, depending on whether one looks at the issue conceptually or structurally. If viewed conceptually, the statement could be true otherwise it is untrue.

Particularly for the purpose of national development in general, and particularly for the restructuring of school curricula to achieve national development, the nature of national needs ought to be viewed structurally. This is so primarily because of the multiple environment in which every African must live and work. For example, dualism exist in the social, economic and political organs of the African society. Consequently, the magnitude and structure of African needs should no doubt be in direct response to the qualitative and quantitative needs of the population as distributed within each dualistic setting. Perhaps the failure of African governments to segmentize national needs when drawing up national and regional plans is an active force in the present wants vs. needs conflict referred to earlier.

Given the dualistic setting, a sample of what we considered as the composition and structure of basic needs for a typical African country are shown in the diagram Fig.1. The premise upon which the diagram is based is as follows: National needs are those needs whose fulfilment would lead to the production and distribution of development needs which are composed of social needs, economic needs and political needs for various age groups of a population distribution in rural and urban centres.

The premise can be symbolically expressed in the following liner relationships:

$$\begin{aligned} \text{The National Needs:} &= \text{Development Needs} = \\ \text{Social Development Needs (SDN)} &+ \text{Economic Development Needs (EDN)} + \text{Political Development Needs (PDN)} \end{aligned}$$

$$\text{SDN} = \begin{array}{|c|} \hline \text{Rural Adult} \\ \hline \text{Social Development} \\ \hline \text{Needs} \\ \hline \end{array} + \begin{array}{|c|} \hline \text{Rural Youth} \\ \hline \text{Social Development} \\ \hline \text{Needs} \\ \hline \end{array} +$$

$$\begin{array}{|c|} \hline \text{Urban Adult} \\ \hline \text{Social Development} \\ \hline \text{Needs} \\ \hline \end{array} + \begin{array}{|c|} \hline \text{Urban Youth} \\ \hline \text{Social Development} \\ \hline \text{Needs} \\ \hline \end{array}$$

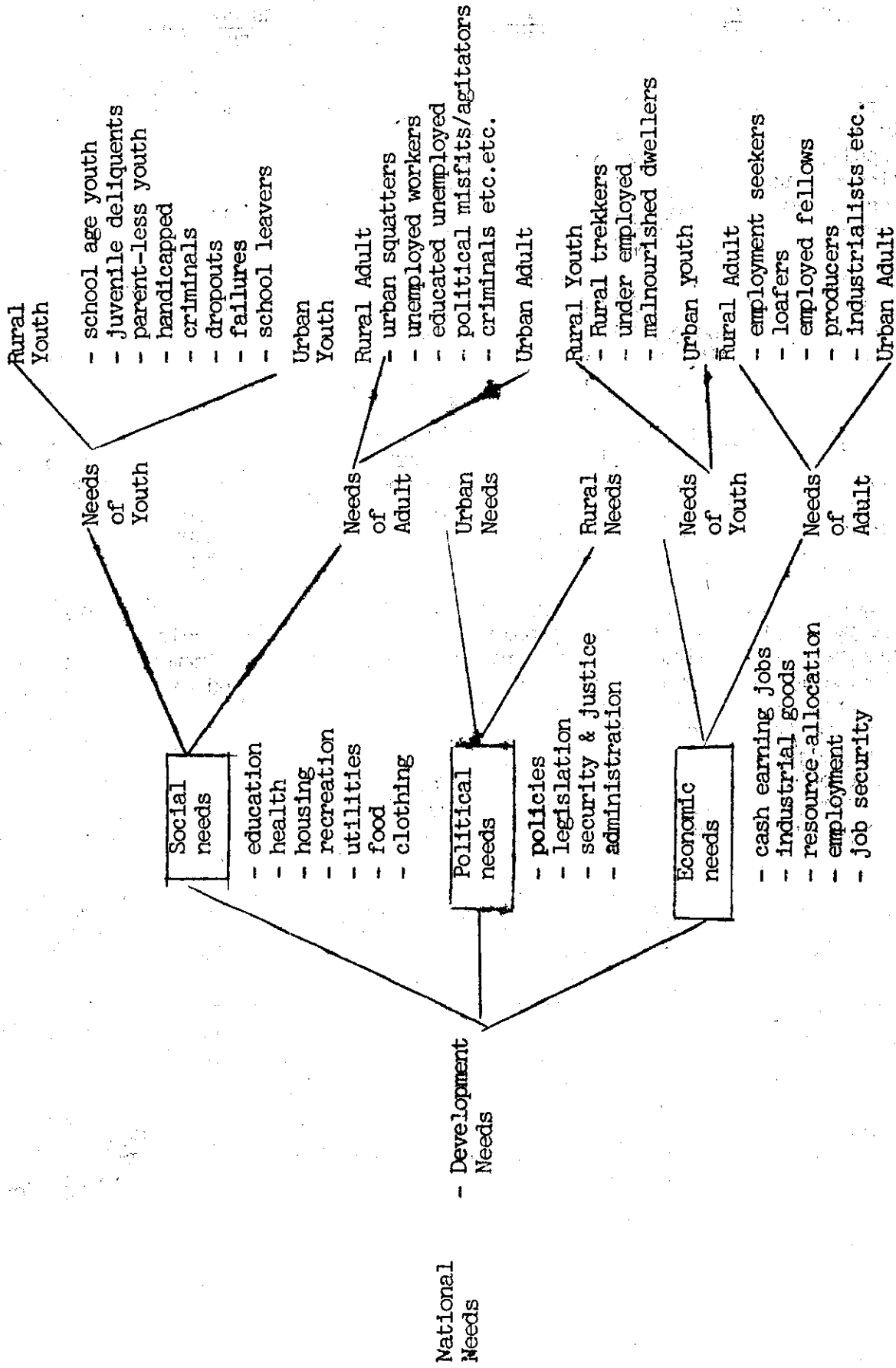
$$= \begin{array}{|c|} \hline \text{Rural Adult} \\ \hline \text{Economic Development} \\ \hline \text{Needs} \\ \hline \end{array} + \begin{array}{|c|} \hline \text{Rural Youth} \\ \hline \text{Economic Development} \\ \hline \text{Needs} \\ \hline \end{array}$$

$$\text{EDN} = \begin{array}{|c|} \hline \text{Urban Political} \\ \hline \text{Economic Development} \\ \hline \text{Needs} \\ \hline \end{array} + \begin{array}{|c|} \hline \text{Rural Political} \\ \hline \text{Economic Development} \\ \hline \text{Needs} \\ \hline \end{array}$$

$$\text{and PDN} = \begin{array}{|c|} \hline \text{Urban Political} \\ \hline \text{Development} \\ \hline \text{Needs} \\ \hline \end{array} + \begin{array}{|c|} \hline \text{Rural Political} \\ \hline \text{Development} \\ \hline \text{Needs} \\ \hline \end{array}$$

From the above expression, ten components of African needs, which ought to be stratified and understood, can be identified. The education implication is that each need must be produced and distributed by a given population of a nation. Accordingly, the producing population must acquire the necessary skills, attitudes and performance abilities to deliver the required needs. This is where the entire education and training system makes its greatest contribution with the content and form of the curricula providing the necessary ingredient to the process. Ironically, this is where African school curriculum and system have its greatest weakness which suggest, among other things, an urgent need for reformation if the needs of Africa are to be produced and distributed by Africans as called for in the Lagos Plan of Action.

Fig.1 The Identification and Stratification of National Needs



c. Costs of Producing and Distributing National Needs and the Expected Responsibility of the Education System in Meeting the Costs

One way to highlight the major role to be played by the education system is to analyse the associated cost of producing and distributing urban and rural needs for both old and young. Like everything else, there is a cost price which must be paid by a given population for the production and distribution of national needs. The degree of willingness to pay such a price is functionally related to the acquired skills, attitudes, knowledge, and national consciousness which are imparted to the population mostly through the education system.

The price tag in question has three components respectively described as (i) the inner price, (ii) the invisible price and (iii) the value price. Usually the inner price and the invisible price are unfortunately ignored by those who desire to provide Africans with their basic needs. This section shall examine what each of the price tag entails and what implications are there for curriculum design.

(i) The Inner Price: This price tag is psychological in nature. It constitutes a series of institutional and individual attitudes throughout the spectrum of society. It involves a high degree of appreciation for those needs that are basic to African culture, values, philosophies and capacities. A willingness to pay this price would mean a drastic reduction of the demonstration effect problem alluded to earlier thereby easing the apparant delima faced by the African education system.

An example would better illustrate the point. Let us take housing for instance. Nearly 70 per cent of the African population live in African traditional housing; yet the development of institutions and capabilities for their refinement and increased production lacks a systematic approach in Africa. Analysis and experience show that when reference is made to housing projects in African national development plans, intentions and actual implementation efforts are limited to modern architectural design with heavy reliance on imported materials and, in some cases, imported labour. This is due partly to the fact that over 95 per cent of the few decision makers do not appreciate openly or otherwise indigenous African houses, even though, those houses are demanded by the masses; and partly due to national rejection of African values in favour of non-African values and taste.

Needless to say that an entire village community could have been structurally transformed during a given plan period if local materials were mobilized for building new structures and modifying African traditional houses. One might wish to emphasize here that such house do constitute a basic need for nearly 90 per cent of the total population whose living standards formulated plans are intended to raise. In spite of this useful observation, appropriate curriculum and training institutions, to produce the types of skills, innovations and acceptability for the construction of African traditional houses, are non-existent in Africa. This neglect therefore results in the inadequate meeting of basic African needs within the context of national economic and social development. Consequently, the willingness to pay the inner price would mean the teaching of skills for village technology, rural and urban employment and for the allocation of domestic resources.

(ii) The Invisible Price: The invisible price constitutes the backbone of the cost structure in meeting national needs. It is invisible in that, it embraces the inter-workings of various policies and strategies designed and taken in committee rooms, in cabinet meetings, at village gatherings, etc. on behalf of the total population. In line with the concept and practice of most African governments, only a small percentage of the African population do get involved with the manipulation of invisible price tag though the payment is done by the entire population.

There are generally three planning elements in this price tag to which particular attention should be paid. First, there is the element of planning for the development and utilization of the nation's human resources. Secondly, there is the need for investment planning and programming, and lastly, there is the element of institution planning and management. The importance of these lies in the argument that the essence of the invisible price, within the context of development, is one of formulating resource mobilization, resource enhancement and resource allocation strategies that are in direct response to the needs of rural and urban dwellers.

The mere statement that the living standards of a group of people shall be raised is indeed insufficient nor is it a terminal condition for fostering development. To practicalize the statement, the invisible price should be well identified and paid. This would mean the efficient development and utilization of national and regional resources. It would further call for the formulation and implementation of inter-related concrete and consistent national objectives, philosophies and ideologies. To provide the foundation for such action, nationalism, dedication to work and development conscious minds would be needed as inputs towards the payment of the invisible price. This is where the school system can make its greatest contribution. Curricula could be so designed so as to generate a high quality level of nationalism, dedication and development oriented minds.

(iii) The value price: The last price tag is the most obvious and well considered among the three towards the meeting of national needs. It involves quantitative and qualitative human and financial capital requirements to deliver the goods and services to the people of a nation.

While the invisible price tag centres around planning capabilities, the value price tag involves the actual management capabilities of resources for development. In other words, the value price is non-abstract and perhaps this quality has given rise to its visibility. The willingness to pay this price would therefore mean the willingness for a group of people to neglect nepotism, greed and individual selfishness and adopt a spirit of dedication and national self-reliance so as to avoid resource mis-management and mis-allocation.

Again the educational system has a major role to play towards the payment of the value price. In the first place a relevant and nationally distributed education would create over time, an enlightened and competitive group of actors in the production and labour markets. Experiences in countries like the United States of America and Japan give the indication that a negative correlation exists between an enlightened and competitive work force on one hand and the degree of mis-management and/or mis-allocation of resources on the other. Secondly, and this is where the structure and content of the school curricula could make all the difference, a well guided human resources development programme could instill in a group of people the desire to cultivate national self-reliance and dedication to work. For such purposes, school curriculum should, in addition to which is teachable, include activities for creating development oriented minds towards the building of a nation or of a region.

IV. INFERENCES FOR SCHOOL CURRICULUM REFORM TO MEET AFRICAN NEEDS

Three major preoccupations have been highlighted in this paper. First it was established that the need for curriculum reform had been long identified but that efforts to do so were constrained by factors such as unco-ordinated national objectives and strategies and Africa's inability to produce textbooks and instructional materials. Secondly, it was argued that a cost structure exist for meeting of national needs, which must be paid by governments and individuals if these needs are to be produced and distributed. Finally, it was shown that with careful planning and organization, the structure and content of the school curricula could play a leading role in (a) the minimization of those constraints that have hampered education reforms efforts in Africa, and (b) the determination of the level and degree at which governments and individuals would be willing to pay the required price.

In view of the analysis, and given the need to allow the education system to play its required role in African development, several considerations which ought to be taken into account when programmes for curriculum reforms are being contemplated, initiated and/or implemented, emerge. The proposition is that unless these conditions are fairly satisfied and integrated within the school system, Africa shall continue to talk of education reform with little or no results. These conditions suggested here as guidepost, are as follows:

1. Production Considerations

- (i) National needs stratified by target groups should be clearly identified and distinguished from national wants.
- (ii) Appropriate skills development and utilization strategies and programmes for the provision of identified needs, should be developed and instituted.
- (iii) Long-range investment profiles by sector, industry and region need to be developed focusing on present and future national needs and available national resources.

2. Consumption Considerations

- (i) Measures to ensure consumers' loyalty to locally produced goods and services should be formulated and implemented.
- (ii) Relevant consumers target groups by types of education demanded and by structure of political, social and economic needs should be identified.
- (iii) Measures should be identified and undertaken to minimize the friction between cultural values and modernization which erupts from the process of social and economic transformation of any society.

3. Institutional Considerations

- (1) Maximum co-operation should be sought between development planners and administrators; manpower planners and users; education planners and educators; and textbook writers with regards to curricula design and modification.
 - (ii) Measures to ensure the provision of African textbooks teaching facilities and materials in relation to the reform should be identified and promoted.
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ANNEXES
Total Population of Africa

Table 1:

	Population (millions)			% increase	
	1960	1980	2000	1960-1980	1980-2000
Africa (1)	275	470	853	70.7	81.5
Africa region (2)	258	440	801	70.8	82.0
% of which urban population	19.8%	27.6	41.5	-	-

Source: UNESCO ED-82/MINEDAF/Ref.2

(1) Based on United Nations estimates of medium variant as assessed in 1980.

(2) Information for 51 countries excluding South Africa.

Table 2: Population Age 6-11 years, Africa "Region" (medium variant)

	Population 6-11 (millions)	Index 1960 = 100	Absolute decennial increase (millions)
1960	40.65	100	-
1970	54.65	134	14.00
1980	72.58	179	17.93
1990	100.97	248	28.39
2000	134.34	330	33.37

Source: UNESCO ED-82/MINEDAF/Ref.2

Table 3: Evolution of Illiteracy in Africa 1970-1990

Population Aged 15 millions	1970	1980	1990	Difference 1970-1990 + or (-)
Illiterates	139	156	168	+ 29 m
Literates	58	101	174	+ 116 m
Total	70.6%	60.6%	49.1%	- 21.5(% points)

Source: Op.cit.Table 5..

(1) The illiteracy rate for the 51 African countries excluding South Africa was estimated at 63.4% in 1980.

Table 4

Estimates of illiteracy rates by sex in 1980 in 39
countries of Africa and percentage points differences
between the rates for females and males

Country (1)	Illiteracy Rates		Country (2)	Disparity F% - M% (% points)
	Females	Males		
Chad	99.5	63.5	Lesotho	- 22.5
Ethiopia *	99.5	90.7	Botswana	- 3.1
Niger	99.5	89.9		
Somalia	99.5	90.0	Upper Volta	8.3
Upper Volta	99.5	91.2	Ethiopia *	8.8
Mali	98.2	81.4	Somalia	9.5
Gambia	97.2	73.2	Niger	9.6
Guinea	95.6	66.5	Mauritania	11.7
Senegal	93.6	66.9	Zimbabwe	14.2
Sudan	93.5	63.5	Mali	16.8
Benin	92.9	56.6	Gabon	17.3
Burundi	92.8	61.3	Ghana	17.5
Sierra Leone	90.9	69.7	Zambia	21.0
Liberia	90.7	57.8	Togo	21.1
Mozambique	88.7	55.6	Sierra Leone	21.2
Nigeria	86.0	53.5	Morocco	21.8
Morocco	85.1	63.3	Gambia	24.0
Guinea-Bissau	84.6	58.4	Congo	24.5
Malawi	80.7	53.4	Rwanda	25.0
Central African Republic	79.6	41.2	Egypt	26.1
Ivory Coast	75.7	42.1	Guinea Bissau	26.2
Togo	75.0	53.9	Algeria	26.5
Algeria	70.9	44.4	Tunisia	26.6
Uganda	68.5	35.6	Senegal	26.7
Kenya	64.9	35.7	Malawi	27.3
Tunisia	63.9	37.3	Guinea	29.1
Ghana	63.8	46.3	Kenya	29.2
Rwanda	62.8	37.8	United Republic of Cameroon	29.2
Libyan A.J.	60.8	24.5	Sudan	30.0
Zaire	60.6	22.8	Burundi	31.5
United Republic of Cameroon	59.0	29.8	Nigeria	32.5
Egypt	58.8	32.7	Liberia	32.9
Botswana	58.6	61.7	Uganda	32.9
Congo	49.1	24.9	Mozambique	33.1
Gabon	45.4	28.1	Ivory Coast	33.6
Zambia	41.7	20.7	Chad	36.0
Zimbabwe	36.2	22.0	Benin	36.3
Mauritania	21.2	9.5	Libyan A.J.	36.3
Lesotho	20.0	42.5	Zaire	37.8
			Central African Republic	38.4

Source: UNESCO Office of Statistics, "Estimates and Projections of Illiteracy",
CSR - E - 29, Paris, 1978.

(1) Countries are shown in order of decreasing female rates

(2) Countries are shown according to the size of the disparity.

* Literacy has greatly increased in Ethiopia since the Revolution

Table 5
Proportion of population by levels of educational attainment: less than secondary; secondary; and more than secondary. Censuses or surveys since 1960 in 24 countries

Country	Year	Age Group	Percentage of Population having A level of educational attainment of:		
			Less than 1 Secondary	Secondary 2	More than Secondary
			%	%	%
Algeria	1971	25 +	97.4	2.2	0.3
Botswana	1971	25 +	96.9	2.4	0.6
Egypt	1976	25 +	90.9	5.7	3.4
Gambia	1973	25 +	96.2	3.6	0.2
Ghana	1960	25 +	98.3	1.1	0.7
Kenya	1969	25 +	96.4	3.6	0.0
Lesotho	1966	25 +	98.3	1.6	0.1
Liberia	1962	25 +	97.3	1.7	1.0
Libyan A.J.	1973	10 +	91.4	7.0	1.6
Malawi	1977	25 +	95.4	4.2	0.3
Mali	1976	25 +	99.4	0.5	0.2
Mauritius	1972	25 +	86.9	11.9	1.2
Morocco	1971	25 +	95.6	4.4	0.0
Namibia	1960	25 +	85.1	12.8	2.1
Senegal	1970	16 +	97.1	2.8	0.1
Seychelles	1971	25 +	84.3	13.2	2.6
Sierra Leone	1963	25 +	97.7	2.0	0.3
Swaziland	1976	25 +	88.2	10.1	1.7
Togo	1970	25 +	98.9	0.9	0.1
Tunisia	1975	25 +	92.4	6.4	1.2
Uganda	1969	25 +	98.3	1.8	0.1
United Rep. of Cameroon	1976	25 +	95.2	4.4	0.3
Gambia	1969	25 +	95.8	3.7	0.6
Zimbabwe	1969	25 +	97.6	1.9	0.6

1. Includes the categories: no schooling, incompleted education at the first level and education at the first level completed.
2. Includes education at the second level not completed and completed.

Table 6

National education structures in Africa (latest information available)

Country	1st Level		2nd Level (General)	
	Entrance	Duration (Years)	Entrance Age	Duration (Years)
Algeria	6	6	12	4 +3
Angola	6	4	10	4 +2
Benin	5	6	11	4 +3
Botswana	6	7	13	3 +2
Burundi	6	6	12	4 +3
Cape Verde	6	4	10	2 +3
Central African Republic	6	6	12	4 +3
Chad	6	6	12	4 +3
Comoros	6	6	12	4 +3
Congo	6	6	12	4 +3
Djibouti	7	6	13	4 +3
Egypt	6	6	12	3 +3
Equatorial Guinea	6	6,8	12	4 +2
Ethiopia	7	6	13	2 +4
Gabon	6	6	12	4 +3
Gambia	8	6	14	4 +2
Ghana	6	6	12	4 +3
Guinea	7	6	13	3 +3
Guinea-Bissau	6	6	12	3 +2
Ivory Coast	6	6	12	4 +3
Kenya	5	7	12	4 +2
Lesotho	6	7	13	3 +2
Liberia	6	6	12	3 +3
Libyan A.J.	6	6	12	3 +3
Madagascar	6,7	6	12,13	4 +3
Malawi	6	8	14	2 +2
Mali	6	6	12	3 +3
Mauritania	6	7	13	3 +3
Mauritius	5	6	11	4 +3
Morocco	7	5	12	4 +3
Mozambique	6	4	10	2 +5
Namibia
Niger	7	6	13	4 +3
Nigeria	6	6	12	5 +2
Rwanda 1/	7	8	15	3 +3
Sao Tome and Principe	7	4	11	2 +5
Senegal	6	6	12	4 +3
Seychelles	6	6	12	2 +5
Sierra Leone	5	7	12	5 +2
Somalia	6	6	12	4
Sudan	7	6	13	3 +3
Swaziland	6	7	13	3 +3
Togo	6	6	12	4 +3
Tunisia	6	6,8	12	3 +4
Uganda	6	7	13	4 +2
U.R. Cameroon	6	6,7	12,13	4 +3,5+2
U.R. Tanzania	7	7	14	4 +2
Upper Volta	7	6	13	4 +3
Zaire	6	6	12	2 +4
Zambia	7	7	14	3 +2
Zimbabwe	7	7	14	4 +2, 4 +3

1/ This system, introduced in 1979, is being implemented gradually.

Table 7

The expansion of enrolment by level of education in major areas
of the world, 1960-1980 1/

Region	Year	Number Enrolled (000's)			Index of Growth (1960 = 100)				
		1st Level	2nd Level	3rd Level	Total	1st	2nd	3rd	Total
Developed countries	1960	124010	47131	9824	180965	100	100	100	100
	1980	123415	81282	30807	237504	101	172	314	131
Developing countries	1960	122006	21480	2630	146116	100	100	100	100
	1980	295515	98323	16391	410229	242	458	623	281
Latin America	1960	27465	3001	572	31038	100	100	100	100
	1980	64383	17789	5326	87498	234	593	931	282
South Asia	1960	73839	15932	1818	91589	100	100	100	100
	1980	168634	63403	9299	241336	228	398	511	263
Africa 'Region'	1960	16788	1634	142	18564	100	100	100	100
	1980	56079	12483	1169	69732	334	764	823	376

1/ All figures on education shown in this report exclude the People's Republic of China and the Democratic People's Republic of Korea.

Table 8

Average annual rates of growth in enrolment by level of education,
major areas, 1960-1980 (percentages)

Region	Level of Education	Average Annual Rates of Growth (%)			
		1960-65	1965-70	1970-75	1975-80
Developed countries	1st	1.5	0.7	1.0	-0.9
	2nd	6.0	2.2	2.4	0.6
	3rd	8.7	7.2	5.2	2.6
	Total	3.2	1.6	0.7	0.0
Developing countries	1st	6.4	4.2	3.9	3.6
	2nd	10.7	7.7	6.8	6.5
	3rd	11.8	8.9	10.9	6.8
	Total	7.2	4.9	4.7	4.4
Latin America	1st	5.6	5.4	3.7	2.8
	2nd	10.3	8.8	10.4	7.7
	3rd	9.8	12.4	17.4	7.8
	Total	6.2	6.0	5.2	4.0
South Asia	1st	6.7	3.6	3.4	3.2
	2nd	10.6	7.0	5.3	5.8
	3rd	12.8	7.8	8.0	5.6
	Total	7.5	4.4	4.0	3.9
Africa Region	1st	6.6	4.8	6.7	6.7
	2nd	12.6	10.6	10.2	9.4
	3rd	12.1	9.5	14.8	8.2
	Total	7.3	5.6	7.3	7.2

Table 9

Africa 'region' enrolment by level and absolute increase by five-year intervals, 1960-1980 (000's)

Level of Education	Number of Pupils Enrolled (000's)				
	1960	1965	1970	1975	1980
1st	16788	23162	29260	40493	56079
2nd	1634	2952	4893	7965	12483
3rd	142	252	396	790	1169
Total	18564	26366	34548	49248	69732
	Increase in Number of Pupils Enrolled (000's)				
	1960-65	1965-70	1970-75	1975-80	
1st	6374	6098	11233	15586	
2nd	1318	1941	3072	4518	
3rd	110	144	394	379	
Total	7802	8182	14700	20484	

Table 10

Estimated number of pupils per teacher by level, major regions, 1960, 1970 and 1980

Region	1960			1970			1980		
	1st	2nd	3rd	1st	2nd	3rd	1st	2nd	3rd
Developed countries	26	20	14	23	17	14	19	15	13
Developing countries	37	18	16	36	19	15	34	22	13
Latin America	34	12	8	32	13	10	28	16	8
South Asia	36	20	21	36	21	15	34	21	15
Africa 'region'	39	19	18	40	24	14	38	23	14

Table 11

Female teachers as percentage of total teachers at first and second levels, major regions, 1960, 1970 and 1980

Region	1960		1970		1980	
	1st	2nd	1st	2nd	1st	2nd
Developed countries	69	41	72	46	72	47
Developing countries	38	28	45	31	45	33
Latin America	79	44	78	46	77	46
South Asia	25	23	34	27	35	30
Africa 'region'	26	24	28	28	30	28

Table 12

Public expenditure on education

	Public expenditure on education (in millions of US\$)				Public expenditure on education per inhabitant (in dollars)			Public expenditure on education as % of GNP		
	1970	1975	1978		1970	1975	1978	1970	1975	1978
Developed countries	147	302	295	520 418 907	137	263	366	5.7	6.0	5.9
Developing countries	12	596	37	559 55 107	7	19	26	3.3	4.0	4.1
Africa 'region'	2	377	6	904 11 144	7	18	27	3.8	4.7	4.8

Source: op.cit. for all tables 7-12.

Table 13
Africa 'region' adjusted gross enrolment ratios by level and
by sex, 1960-1980 (percentages)

Level of education	Both sexes					Male		Female	
	1960	1965	1970	1975	1980	1960	1980	1960	1980
First	41	49	53	64	77	54	87	29	67
Second	5	7	11	15	20	7	25	2	15
Third	0.6	1.0	1.4	2.3	3.0	1.0	4.3	0.2	1.6
Total	19	24	27	33	40	25	46	13	34

Table 14
Africa 'region' estimated number of teachers by level of education,
1960-1980 (in thousands)

Level of education	1960	1965	1970	1975	1980
First	428	575	737	1 044	1 476
Second	87	140	203	335	543
Third	8	16	29	51	84
Total	523	731	969	1 430	2 103

Table 15
Africa 'region' estimated number of pupils per teacher, by level of
education, 1960-1980

Level of Education	1960	1965	1970	1975	1980
First	39	40	40	39	38
Second	19	21	24	24	23
Third	18	16	14	15	14
Total	36	36	36	35	33

Table 16
Public expenditure on education

	Public expenditure on education (in millions of US\$)			Public expenditure on education per inhabitant (in dollars)			Public expenditure on education as % of GNP		
	1970	1975	1978	1970	1975	1978	1970	1975	1978
Developed countries	147 302 295 520	418 907	137 263 366	5.7	6.0	5.9			
Developing countries	12 596 37 559	55 107	7 19 26	3.3	4.0	4.1			
Africa 'region'	2 377 6 904	11 144	7 18 27	3.8	4.7	4.8			

Table 17

Intake and survival rates in primary education and transition rate to secondary general education, around 1978

Country	Apparent Intake Rate to Grade 1 of Primary Education	Survival Rate to the Final Grade of Primary Education	Transition Rate from Primary to Secondary General Education
	(a)	(b)	(c)
Algeria	0.89	0.75	0.50
Benin	0.66	0.58	0.38
Botswana	1.05	0.79	(0.38)
Burundi	0.27	0.66	0.07
Central African Rep.	0.70	0.49	0.22
Congo	1.35	0.89	0.71
Egypt	(0.80)	0.65	0.81
Gambia	0.49	0.96	0.40
Guinea-Bissau	1.34	0.10	0.48
Ivory Coast	0.71	0.93	0.27
Kenya	1.10	0.52	(0.44)
Lesotho	1.34	0.38	(0.45)
Libyan A.J.	1.16	0.72	0.72
Madagascar	1.33	0.37	0.44
Malawi	1.00	0.25	0.10
Mali	0.24	0.61	(0.75)
Mauritania	0.27	0.77	0.54
Morocco	0.65	0.82	0.35
Niger	0.24	0.67	0.35
Rwanda	0.89	0.72	0.06
Seychelles	...	0.94	0.97
Sudan	(0.61)	0.75	(0.47)
Swaziland	1.19	0.60	0.69
Togo	1.03	0.68	0.50
Tunisia	0.94	0.75	0.19
Uganda	0.57	0.58	(0.13)
U.Rep. of Cameroon	1.0	0.62	0.21
U.Rep. of Tanzania	(1.05)	0.84	(0.09)
Upper Volta	0.20	0.64	0.18
Zaire	0.92	0.64	(0.63)
Zambia	0.97	0.80	0.20

Notes: (1) In a comparative analysis of transition between first and second level education, transition rates of the same magnitude for two countries may mask considerable differences in the overall development of education in the two countries. An attempt has therefore been made in this table to qualify the transition rate from primary to secondary general education by supplementing it with the corresponding intake and survival rates for primary education.

(2) For certain countries the intake rate and/or the transition rate is shown in parenthesis, since they have been calculated by using total enrolment (including repeaters). Due to the lack of data on repeaters, these rates are necessarily inflated.

Table 18

Third-level education: estimated number of African students abroad
1974/1975 and 1979/1980

Host Region	Number		% Distribution	
	1974/75	1979/80	1974/75	1979/80
TOTAL	99700	169700	100.0	100.0
Africa	11100	18100	11.1	10.7
Northern America	20400	39100	20.5	23.0
Latin America	700	900	0.7	0.5
Asia	4100	7100	4.1	4.2
Europe and U.S.S.R.	63100	104100	63.3	61.4
Oceania	300	400	0.3	0.2

Table 19

Third-level education: major countries of study of African students
abroad 1974/1975 and 1979/1980

Country of study	Number of African students		% of Total African Foreign Students		Index 1979/80 (1974/75= 100)
	1974/75	1979/80	1974/75	1979/80	
France	33915	59174	34.0	34.9	174
U.S.A.	18380	36350	18.4	21.4	198
U.S.S.R.	7921	13654(2)	7.9	8.3	172
United Kingdom	8672	12168	8.7	7.2	140
Egypt	1201	7434	1.2	4.4	619
Belgium	2069	5299(2)	2.1	3.2	256
Federal Rep. of Germany	3046	4081	3.1	2.4	134
Canada	...	2744	...	1.6	...
Saudi Arabia	668	2474	0.7	1.5	370
Senegal	1587	2303	1.6	1.4	145
India	1943	2131(1)	2.0	1.3	110
Ivory Coast	...	1548(2)	...	0.9	...
Iraq	403	1389(2)	0.4	0.8	345
Italy	1162	1229	1.2	0.7	106
German Democratic Rep.	869	1204	0.9	0.7	138
Czechoslovakia	428	1138	0.4	0.7	266
Sudan	3642	1029(2)	3.6	0.6	28

(1) Data refer to 1977/78.

(2) Data refer to 1978/79.

Table 20

Third-level education: major countries of origin of African students
abroad 1974/1975 and 1979/1980

Country of Origin	Nationals Studying Abroad			
	Number		As of % of home enrolment at 3rd level	
	1974/75	1979/80	1974/75	1979/80
Nigeria	10749	23330	27	28
Morocco	8381	17369	25	23
Algeria	6548	12616	18	22
Tunisia	7645	9382	55	31
Sudan	3580	9243	16	34
Togo	1172	9065	72	249
Egypt	7979	6483	2	1
Uganda	1049	4564	19	62
Libyan Arab Jamahiriya	2103	4286	18	28
Ivory Coast	2159	3641	32	25
Ghana	2362	3145	33	32
Kenya	2784	3098	8	30
Zaire	1640	1226	29	5
Senegal	1512	2751	24	22
Ethiopia	2851	2464	20	17
Madagascar	1049	2463	41	11
Zimbabwe	930	2365	83	163
Tanzania	1762	2271	51	56
Upper Volta	1347	2134	178	162
Congo	1331	2115	11	31
Mauritius	1763	1728	133	142
Mali	1047	1566	43	33
United Republic of Cameroon	2471	1226	40	12
Gabon	876	1173	89	92

Table 21

Third-level education: percentage distribution by broad field of study of African students abroad, 1978/79

Country of Study	Number of African students	Percentage Distribution by Broad Fields of Study					Not specified
		Education Sciences	Social Science and Humanities	Natural Science and Engineering	Medical Sciences	Agriculture	
France	55747	-	57.9	-	15.6	-	26.5
U.S.A.	33990	5.6	39.1	19.1	19.2	6.1	10.9
Federal Rep. of Germany	4190	1.2	25.2	46.5	9.0	7.5	10.6
Canada	2696	7.1	32.0	30.6	1.8	5.0	23.4
Senegal	1978	-	47.4	13.2	35.1	3.4	0.9
Ivory Coast	1548	-	80.4	13.1	6.5	-	-
Saudi Arabia	1570	6.0	77.0	8.8	6.6	1.4	0.4
Italy	1364	1.2	18.8	36.8	35.1	6.3	1.8
German Democratic Rep.	1129	3.0	14.4	35.0	9.2	16.5	21.9
Total (including other countries)	109500	2.3	50.0	10.7	16.0	2.6	18.4

Note: This table lists 9 countries having more than 1000 African foreign students and for which data by field of study were available. The total of 109500 covers all countries which supplied this information.

Table 22

Africa 'region': enrolment by level of education and by sex
estimate for 1980 and projection for 2000 (in thousands)

Level of Education	1980			2000			Multiplication factors 2000 as compared to 1980		
	MF	M	F	MF	M	F	MF	M	F
1st	56079	31699	24380	125662	66815	58847	2.24	2.10	2.41
2nd	12483	7824	4660	49317	27858	21458	3.95	3.56	4.60
3rd	1169	854	315	4528	3088	1439	3.87	3.62	4.57
Total	69732	40377	29354	179507	97762	81745	2.57	2.43	2.78

Table 23

Africa 'region': female enrolment as a percentage of total
enrolment by levels, 1980, 1990 and 2000

Level of Education	1980	1990	2000
1st level	43	46	47
2nd level	37	42	44
3rd level	27	30	32
Total	42	45	46

Table 24

Africa 'region': out-of-school youth, by sex,
1960, 1980 and 2000

Sex	Age-Group 6 - 11			Age-Group 12 - 17		
	1960	1980	2000	1960	1980	2000
MF	A. Population (000)					
MF	40650	72580	134340	33320	59250	111820
M	20300	36440	67630	16640	29730	56190
F	20350	36140	66710	16680	29520	55630
	B. Out-of-School(000)					
MF	27950	27970	28330	28170	38380	53180
M	12180	11630	11890	13020	17050	23400
F	15770	16340	16440	15150	21330	29780
	C. Percentage Out-of-School					
MF	68.8	38.3	21.1	84.5	64.8	47.6
M	60.0	31.9	17.6	78.2	57.3	41.6
F	77.5	45.2	24.6	90.8	72.3	53.6

Table 25

Projections of enrolment ratios by level of education
and by age-group. Both sexes (percentages) ^{1/}

Region	Year	Adjusted Gross Enrolment Ratios			Enrolment Ratios by Age-Group		
		1st Level	2nd Level	3rd Level	6-11 years	12-17 years	18-23 years
Developed countries	1980	106	79	31.0	93	83	33.1
	1985	106	83	32.7	92	87	34.3
	1990	105	84	34.7	92	89	36.6
	1995	105	84	35.6	92	89	37.5
	2000	104	86	37.5	93	89	39.5
Developing countries	1980	86	32	7.2	68	39	11.1
	1985	88	38	8.6	72	43	12.9
	1990	91	42	9.9	75	47	14.7
	1995	93	46	10.9	77	49	16.2
	2000	95	49	11.8	79	51	17.3
Latin America	1980	102	45	14.9	81	64	22.3
	1985	104	53	18.3	84	69	25.9
	1990	106	59	21.5	86	72	29.4
	1995	107	63	24.2	88	74	32.4
	2000	107	67	26.1	89	76	34.5
South Asia	1980	83	32	6.4	66	33	9.0
	1985	85	37	7.4	69	37	10.3
	1990	88	41	8.3	72	39	11.6
	1995	90	44	9.2	74	42	12.7
	2000	91	48	9.9	76	43	13.6
Africa "Region"	1980	77	20	2.9	62	35	7.8
	1985	83	28	3.9	68	42	10.0
	1990	87	34	4.8	73	47	12.2
	1995	90	39	5.6	77	50	14.0
	2000	92	42	6.1	79	52	15.1

^{1/} A gross enrolment ratios for given level of education is derived by dividing the total enrolment at this level regardless of age, by the population which according to national regulation should be enrolled at this level. For the third level education, a five year age group was used for all countries based on the secondary school-leaving age; whereas an enrolment ratio is obtained by dividing enrolment in a given age-group by the population of the same age group.

Table 26

Projections of gross enrolment ratios for primary education
and age-specific enrolment ratios 6-11 years by country
Both sexes. 1980 and 2000

Country	Age-Group of National Structure	Gross Enrolment Ratios 1st Level (%)		Age-Specific Enrolment Ratios, 6-11 Years (%)	
		1980	2000	1980	2000
Algeria	6-11	97	103	83	96
Benin	5-10	61	90	50	75
Botswana	6-12	102	102	85	97
Burundi	6-11	27	65	18	43
Central African Rep.	6-11	72	98	50	72
Chad	6-11	37	50	28	40
Egypt	6-11	76	85	71	79
Equatorial Guinea	6-11	86	98	66	77
Ethiopia	7-12	39	78	25	61
Gambia	8-13	43	67	33	52
Ghana	6-11	73	91	60	76
Guinea	7-12	36	53	28	43
Guinea-Bissau	6-11	98	121	62	95
Ivory Coast	6-11	78	100	60	90
Kenya	5-11	98	96	87	93
Lesotho	6-12	104	110	67	81
Liberia	6-11	64	84	40	65
Madagascar	6-11	102	106	82	94
Malawi	6-13	61	90	40	65
Mali	6-11	29	58	20	40
Mauritania	6-12	31	61	24	49
Mauritius	5-10	103	112	91	98
Morocco	7-11	77	105	49	70
Mozambique	6-10	97	115	74	94
Niger	7-12	25	53	20	43
Nigeria	6-11	88	98	75	92
Rwanda	7-14	65	84	62	79

Table 26 (cont'd..)

Senegal	6-11	45	78	37	65
Sierra Leone	5-11	40	64	35	56
Somalia	6-11	43	91	23	49
Sudan	7-12	53	81	40	61
Swaziland	6-12	103	106	82	95
Togo	6-11	114	141	78	97
Tunisia	6-11	103	107	82	94
Uganda	6-12	61	79	56	76
United Rep. of Cameroon	6-11	104	105	77	87
United Rep. of Tanzania	7-13	104	111	77	84
Upper Volta	7-12	18	34	13	25
Zaire	6-11	93	101	72	90
Zambia	7-13	95	107	69	79
Zimbabwe	7-13	79	84	73	80

Source: op.cit. for all Tables 13-26.