

# UNITED NATIONS ECONOMIC AND SOCIAL COUNCIL



53651

Distr.  
LIMITED



E/CN.14/WP.6/21  
22 August 1968

Original: ENGLISH/  
FRENCH

ECONOMIC COMMISSION FOR AFRICA  
Working Party on Manpower and Training  
Second session  
Addis Ababa, 28 October - 1 November 1968

## IDENTIFIED MANPOWER AND TRAINING PROBLEMS IN AFRICA: STATUS REPORT (prepared by the secretariat)

### TABLE OF CONTENTS

	<u>Paragraphs</u>
INTRODUCTION . . . . .	1 - 5
MANPOWER AND TRAINING PROBLEMS IN AFRICA . .	6 - 18
A. Manpower problems . . . . .	7 - 13
B. Training problems . . . . .	14 - 18
THE BASIC CAUSES OF MANPOWER AND TRAINING PROBLEMS IN AFRICA . . . . .	19 - 29
MEASURES FOR RESOLVING AFRICA'S MAJOR MANPOWER AND TRAINING PROBLEMS . . . . .	30 - 42
A. Economic and social measures . . . . .	32 - 38
B. Educational and training measures . . . .	39 - 42
ANNEX THE SITUATION IN INDIVIDUAL COUNTRIES	

M68-1158

## INTRODUCTION

1. Economic and social development is today the major preoccupation of the authorities in the various African countries. This legitimate concern is the result of exigencies which are not only human but above all, political. With the present development of information media the African peoples are becoming increasingly aware that their poverty is not inescapable and are urging their leaders to consider means for enabling them to share as rapidly as possible in the prosperity enjoyed by the peoples of the richer continents.
2. In their efforts to achieve this fundamental objective African authorities are confronted with various difficulties which include the problems of the development and utilization of human resources. The significance of these problems stems from the now recognized role of the human factor in economic and social development. In this connexion, reference must be made to the unanimous opinion of both theoreticians and practical men that, although development involves a contribution of capital, it requires above all men with skills who are capable of making the best possible use of capital in the production process.
3. It is therefore useful to be able to appreciate the nature, extent and similarities or divergences of the problems presented by the application and utilization of human resources in the various African countries. Similarly, a knowledge of the various experiments and approaches adopted in various countries with the aim of coping with these problems can help in the joint effort to find appropriate solutions. Lastly, the precise identification of these problems will make it easier to define and formulate adequate programmes of study and training fellowships so as to assist African countries in their efforts to eliminate manpower bottlenecks.
4. This paper is intended primarily to determine and analyse the major manpower and training problems confronting the various African countries, the underlying causes of these problems, and the measures planned or being taken to overcome them. The materials on which the analysis that follows is based have been derived primarily from relevant country documents and notes communicated to the secretariat. The paper is in fact a status report, reflecting aspects of manpower and training problems of which African countries have taken full cognizance.
5. The information on the situation in each country, as contained in the Annex, refers exclusively to the main problems of manpower, employment and training which were specially considered in the development plans of the countries concerned. Consequently, not all aspects of the problems of manpower and training have been taken into account. For example, although all African countries are known to be suffering from unemployment and underemployment, these problems have only been discussed in cases where the country plans mentioned them.

## MANPOWER AND TRAINING PROBLEMS IN AFRICA

6. The manpower and training problems confronting African countries vary according to their stage of overall development, density of population, proportion of wage-earners in the active population, level of educational development and its adaptation to economic requirements and to a variety of other socio-economic factors. Consequently, the attempted synthesis being made here with the aim of giving a regional picture of the problems is bound to be incomplete. However, it summarizes the problems common to the various countries. Variations from the common pattern will be bound in the Annex. For reasons of convenience and clarity of analysis a distinction is made between manpower problems and training problems.

### A. Manpower problems

7. An analysis of the available documents shows that various African countries are confronted, to a more or less serious extent, with the following principal manpower problems:

- unemployment
- under-employment
- low productivity
- shortage of skilled personnel
- surplus educated jobless young persons.

8. Unemployment is particularly a problem in urban areas. It has, since the early 1960s, grown in relative magnitude and has become a source of serious concern for the people in authority in African countries. During the period 1960-1965, the rate of development in the general level of employment slowed down appreciably in the great majority of African countries. In certain countries the level of employment in fact diminished during the period in question. <sup>1/</sup>

9. It is necessary to differentiate between unemployment as commonly found in the industrialized countries, which consists of a situation in which an able-bodied worker is out of job for a period of time in which gainful employment is sought and the type of unemployment found among young persons without adequate training and skill for engagement in specific occupations and who leave the countryside in the search of non-existent jobs in the towns. These young persons with false notions of their capabilities swell the supply of manpower and further aggravate employment problems in the urban areas.

10. Recent trends in the growth of the mass of young people without work have tended to complicate yet further the manpower problem confronting African authorities. It is increasingly a matter of young people who have

<sup>1/</sup> A Survey of Economic Conditions in Africa, 1960-1964. Doc. E/CN.14/401. para. 165.

finished the complete cycle of primary education, and in some cases the first years of secondary education, but who for financial and other reasons were unable to continue their studies. This class of manpower, which is relatively educated but with no particular skill qualifications, is not content to do any kind of job. In particular, it is disdainful of manual jobs and aspires to more "noble" employment, with preference for administrative and clerical jobs. But the plethora of administrative personnel in most African countries, at least as regards this category of staff, makes it impossible to satisfy such pretensions. It is thus understandable that the problem of jobless young people is a major preoccupation of African leaders, the more so as these young people feel that it is the fault of their leaders that they are jobless and frustrated. These young people constitute a constant threat to the stability of political regimes in Africa.

11. At the same time African countries are suffering from seasonal or chronic structural under-employment. This type of under-employment is apparent mainly in the rural areas where the density of population per farm holding, the climatic conditions and the rudimentary nature of production methods combine to make part of the available labour force redundant and labour participation rate reduced. But under-employment has also made its appearance in the urban areas, particularly in the public and semi-public services. Mention has already been made of the plethora of personnel of junior grades in most African administrations. This plethora presupposes the definite existence of under-employment among such personnel since, in addition, the tasks of which this category of manpower is assigned do not require such a huge staff. Another type of under-employment is that which affects certain senior categories of personnel engaged in tasks which do not correspond to their qualifications, often for purely political reasons. This wastage of skilled personnel, which is increasingly frequent, is particularly reprehensible as African countries are short of trained personnel.

12. In Africa labour productivity is generally low. It is much more lower in the traditional sectors than in the modernizing ones. Productivity studies in a number of African countries have, however, satisfactorily established that the prevailing low productivity rate is due primarily to factors other than those inherent in the natural attributes of an African worker and that given the same environment and working conditions an African worker is as productive as any other worker of the same education and training. <sup>1/</sup> Some of the factors which handicap the productivity of an African worker includes problems of poor nutrition and debilitating diseases, inadequate training, lack of acclimatization to industrial life and its peculiar attitudinal frame of mind, inadequate and often ill-maintained working machines and tools, relatively low remuneration for manual and hard work, limited fringe benefits and management and organizational factors outside the control of the worker himself. Low productivity has not only perpetuated low wages but also contributed to higher production cost per

1/ Report on Nigerian National Seminar on Productivity in Selected Industries (12-14 February 1963), Federal Republic of Nigeria, Lagos 1964.

The Human Factors of Productivity in Africa, A Preliminary Survey C.C.T.A. Inter-African Labour Institute, 2nd Edition.

unit of output which in turn limits the size of potential markets and of employment. Hence the sustained efforts many African countries are making to raise productivity.

13. A further major manpower problem confronting African countries is the shortage of skilled personnel. The acuteness of this shortage varies depending on the country and type of personnel considered. Generally speaking, the shortage is most acute at the intermediate levels, particularly as regards technicians. Similarly, the African countries south of the Sahara are affected more severely than the North African countries. But it is envisaged that, regardless which country is considered, this shortage of skilled personnel will become more acute as African economies develop unless African authorities immediately take the appropriate measures. In effect, development requires an ever larger and ever more diversified number of skills. We shall see later that because the supply of skilled personnel resulting from the present educational and training systems of African countries will be insufficient to meet future requirements, both quantitatively and qualitatively, one is led to the conclusion that, in the final analysis, the shortage of skilled personnel constitutes the real bottleneck in the economic development of African countries.

#### B. Training problems

14. The main problems of training confronting African countries can be classified as follows:

- qualitative and quantitative deficiencies in teacher supply,
- inadequacy of the material and financial facilities for education and training,
- imbalance between the various levels and types of education,
- lack of rationally established training programmes.

15. The shortage of teachers and instructors is a particular aspect of the general shortage of personnel referred to in the previous section. Quantitatively this shortage is apparent throughout the upper level of pupil-teacher ratios. Few indeed are the African countries in which the number of pupils per teacher in primary schools is below 40. This overcrowding of classes inevitably has an effect on the quality of teaching. The problem is aggravated by the fact that in Africa less than 30 per cent of the teaching staff has had the necessary professional training. In almost all African countries the rapid increase in the number of school children has compelled the authorities to have recourse to temporary staff such as monitors, most of whom have not had any previous professional training.

16. To the shortage and inadequacy of human means for training should be added that of material and financial means. Undoubtedly enormous efforts had been exerted in education and training in African countries in the past decade. Thus several African countries are already devoting close on one-fifth of their public expenditure to education and training. Some countries,

admittedly few in number, have attained the objective decided upon at the Addis Ababa conference which advocated the assignment of four per cent of the national income to expenditure on education and training. However, the unsatisfied needs are still immense, and even increasing. It does not seem economically feasible that the level at present attained in expenditure on education and training in most African countries could be greatly exceeded. The problem is therefore to seek the means and methods for making the best and economical use of present resources.

17. African countries are confronted with two types of imbalance in the educational field. Firstly, the number of pupils attending primary schools is disproportionately higher than those attending secondary schools, who in their turn greatly exceed the number of those in higher education. Apart from a few exceptions, the proportion of primary school pupils who go on to secondary schools and to institutes of higher education remains particularly low. This proportion in most African countries is estimated to be below 20 per cent as regards secondary education and barely above one per cent as regards higher education. Secondly, education of the traditional type is far more common than technical and vocational education. In almost all African countries the great majority of secondary school pupils are enrolled in general studies in which the sciences play a very small part. This phenomenon is also to be observed at the higher educational level in which the study of the arts and law is commonly preferred by students, resulting in even a declining rate of enrolment in the sciences and technological disciplines. This imbalance is a source of concern for two reasons: firstly, the necessary skills for economic development are acquired after primary education, and it is to the extent that the numbers attending secondary schools will be sufficient that it is hoped that quantitatively at least, there will be the required trained personnel, secondly, the trained manpower needs of the African countries mainly relate to technical and scientific personnel. There is therefore a great risk that, if no immediate action is taken to remedy these various sources of imbalance, the African labour market will be inundated with educated personnel not suited for meeting the economy's real needs. The consequences of such a state of affairs would be the same as those applying to young people without work, namely the constant threat to the stability of African political regimes.

18. One major handicap in training efforts which prevails in many African countries, although not often highlighted, is the lack of rationally formulated training policies and strategy which could ensure the effective integration of national training programmes in overall development plans and thereby further ensure that trained manpower will be available in adequate numbers and quality for the implementation of planned development projects. This weakness derives from the failure to provide for suitable machinery for training programming within the context of manpower planning and to ensure that trained nationals are available to operate the machinery on a continuing basis. The result is that more often than not national training efforts, including manpower oriented formal education are not effectively co-ordinated to have their fullest impact on the supply of skilled personnel for economic and social development.

## THE BASIC CAUSES OF MANPOWER AND TRAINING PROBLEMS IN AFRICA

19. In the preceding paragraphs we have explained the major manpower and training problems confronting most African countries. As was earlier pointed out only problems that are most common to countries have been identified. It is realized that each country is confronted with its own peculiar problems which have not been dealt with in the attempt at a synthesis. Similarly we shall try in the subsequent paragraphs to analyse the basic causes of the various manpower and training problems in Africa. It should be emphasized that only the need for clarity justifies the distinctions made between the various causes given. In fact they operate simultaneously and often interdependently.

20. An analysis of the explanatory causes of the various manpower and training problems in Africa shows that the problems originate mainly from a combination of the effects of demographic and socio-economic factors. Among these factors reference must be made to:

- the rapid increase in population,
- the phenomenon of urbanization,
- the low degree of industrialization,
- the use of capital-intensive productive techniques,
- the slow growth rate of the agricultural sector,
- the constant deterioration in terms of trade,
- the insufficient extent to which the educational system has been adapted to economic needs,
- the negative attitude of personnel to certain types of jobs,
- the lack of an overall strategy for the development and utilization of human resources within the context of overall development planning.

21. African countries are affected by the phenomenon of a rapid increase in population like most developing countries. In this connexion, it has been estimated that during the period 1960-1965 the total population of Africa rose from 273 million to 306 million, an average annual rate of increase of 2.3 per cent. <sup>1/</sup> With regard to the population of working age which concerns us here it grew during that period at the same rate, 2.3 per cent per annum. But it is forecast that this rate of increase will tend to accelerate during the next decade when the average annual rate of increase of the working-age population will rise from 2.3 per cent in 1965 to 2.5 per cent in 1975. <sup>2/</sup>

22. If the growth of population in rural and urban areas is considered separately, it is apparent that demographic pressure has been notably greater in the towns. Hence it is estimated that in recent years the urban

<sup>1/</sup> United Nations estimates - average figure

<sup>2/</sup> Ibid.

population has been growing three times as fast as the rural population. <sup>1/</sup> This phenomenon of rapid urbanization is explained in part by the existence of an ever larger inflow of migrants from the rural districts to the towns.

23. In the face of this rapid increase in potential human resources to be developed, trained and employed the general economic development of African countries has been relatively modest. In any event, it does not seem to have been sufficient to absorb the newcomers on the labour market. In this respect, it is estimated that in recent years the gross domestic products of all the African countries has risen to an average annual growth rate of 4.2 per cent. <sup>2/</sup>

24. The level of industrial development in African countries remains low despite on accelerated growth rate in the manufacturing and construction sectors. Furthermore, industry employs only a small proportion of African manpower. This is partly explained by the fact that industrialization in Africa generally consists of creating or expanding capital-intensive industries. This is because foreign businessmen are accustomed in their native countries to production techniques which require much capital, and tend to introduce this method of production into Africa.

25. The agricultural sector, which is foremost in importance in African economies, has developed very slowly in recent years. Between 1960 and 1966 agricultural output, measured in terms of value added and at 1960 factor cost, grew at only an average annual rate of 1.3 per cent in Africa as a whole, a growth rate of about two-fifths of the annual increases in overall gross domestic product. <sup>3/</sup> This slow growth of the agricultural sector is largely but not solely explained by the rudimentary nature of production methods and traditional land-use systems in the sector as well as by the depressed market situation for staple agricultural products. As a result development in the agricultural sector has been unable to generate sufficient additional employment opportunities to absorb increasing numbers of newcomers on the labour market.

26. The index value of exports from African countries fell from 100 in 1960 to 94 in 1962, but rose to 100 in 1965. At the same time, the unit value of imports increased by 5 per cent. It must be pointed out that the terms of trade were already adverse in 1960 compared with 1958. <sup>4/</sup> The effects of this deterioration in terms of trade are most apparent in the rural areas where they meant an actual decrease in the purchasing power of the peasant masses. This circumstance is translated in its turn into an ever larger flow of migration from the countryside to the towns. As agriculture has proved incapable of supporting itself, people abandoned it to seek better living conditions in the towns.

27. Another factor underlying Africa's manpower and training problems is that the educational system has not been adequately adopted to African economic needs. In countries in which the agricultural sector is the

<sup>1/</sup> A Survey of Economic Conditions in Africa 1960-1964, op.cit. para. 168.

<sup>2/</sup> Ibid. paragraph 5.

<sup>3/</sup> A Survey of Economic Conditions in Africa, 1967, Parts 1 and 2, document E/CN.14/409, p.61.

<sup>4/</sup> A Survey of Economic Conditions in Africa, 1960-1964, op. cit., para. 124.



dominant sector in the economy, the educational system should have emphasized the teaching and practice of modern agricultural methods and techniques. Paradoxically, the educational systems in African countries are characterized by the very minor role they assign to the teaching of agriculture. This is explained by the fact that these systems are modelled on the educational systems of the colonizing countries. Consequently, these systems produce people who are not fit for the African economies because they have not been trained in the proper fields and with the right orientation. This circumstance explains in its turn the existence of the mass of jobless young people referred to in the previous section.

28. In addition to the consequences of the ill-adapted educational system, we must point out the negative attitude of African personnel to certain types of job. Generally speaking, people who have received some education, however minimal, are reluctant to apply for manual jobs, particularly in agriculture. As has been pointed out elsewhere, such people prefer administrative jobs. But the non-agricultural sectors are characterized in Africa by high production/manpower ratios and are not developing fast enough.

29. A further factor explaining African manpower and training problems is the lack of an overall strategy for the use of human resources. First and foremost, there are few African countries which have a rational and coherent plan regarding manpower and training requirements. In the countries which do have such plans, they have on the whole no connexion with the overall economic and social development plan. Hence they are unrealistic documents. Another indication of this lack of an overall policy as regards human resources is that the system for remunerating cadres in most African countries is not equitable. This system in general disregards the relative scarcity and importance of the various types of trained manpower. This hardly encourages training in the technical fields which the African economies most need. Indeed, technical studies are generally difficult and of long duration. Where there is no differentiation in the payment received by those who study technical subjects and other people, there can be no doubt that very few people will go in for technical subjects.

#### MEASURES FOR RESOLVING AFRICA'S MAJOR MANPOWER AND TRAINING PROBLEMS

30. The measures planned by African countries to solve their manpower and training problems vary from country to country. This diversity corresponds on the whole to the diversity of the problems which these measures are designed to solve. Hence the synthesis attempted here is aimed at giving only a regional view of these measures. Thus, as before, the reader is referred to the Annex to this paper for a more detailed picture of the various measures planned in each country.

31. It appears that we can group under two main headings the various measures proposed by African countries for dealing with their manpower and training problems, namely: economic and social measures, and educational and training measures.

A. Economic and social measures

32. The principal economic and social measures commonly adopted by African countries for overcoming their manpower and training problems include:

- definition of the planned objectives of employment and training,
- encouragement of research, publicity and development with regard to various labour-intensive production techniques,
- preparation and implementation of programmes for the training and employment of young people,
- preparation and implementation of rural development programmes,
- encouragement of adults to improve their productivity through education and training rather than through the automation of the production process.

33. It must be pointed out that the various measures are not mutually exclusive. They combine to help bring about a better solution of the problems of human resources development confronting member states. Naturally the importance attached to any one of these measures in any one country depends on the nature and acuteness of the problems which the country has to deal with.

34. In the face of their manpower and training problems, an initial reaction of various African countries has been to propose undertaking mainly when their economic and social development plan is being prepared, an evaluation of their resources and manpower and training requirements. This involves estimating not only the quantitative manpower requirements necessitated by production targets but also the qualitative requirements expressed in terms of types of skills needed. With regard to resources, the evaluations concern the availability of trained personnel as well as unskilled labour. Some countries have, in addition to such overall surveys which are bound to take time, included employment and training targets in their development plans in order to deal with the most urgent problems.

35. The various African countries have, so as to provide productive work for their unemployed, encouraged research into, and publicity and development of labour-intensive production techniques on condition, however, that the use of such techniques does not in any way reduce the economic profitability of the projects. Several incentives have been proposed for this purpose. They include:

- the definition and implementation of an incomes policy designed to arrest the wages spiral and encourage the substitution of labour for capital,
- charging duty on imports of capital goods
- exemption from taxes and granting of investment credits to enterprises in relation to their productive capacity or value added and not in terms of the capital utilized.

36. The acuteness and complexity of problems concerning youth have caused most African countries to pay special attention to them. Hence in the various African countries, the training and employment of young people, like their constructive participation in the economic and social life of their countries, are being encouraged through the establishment of programmes of varying extent and which introduce various ideas. Among these programmes we must mention:

- the establishment of youth centres designed to give a profession and useful training to young people who left school after having completed a fairly long period of schooling, or who, on the contrary, never attended school,
- the system of "brigades of workers" and national construction programmes intended to provide jobs for young people who are out of work,
- agricultural settlement programmes, specially designed to occupy young school-leavers in agricultural employment.

37. Another concern of the various African governments is that of making good use of the enormous volume of available, but unused man-days in the rural economy. This has caused some African countries to prepare and implement programmes for mobilizing rural manpower for development purposes. The size, form and nature of these programmes vary from country to country. But everywhere the target is to create jobs and to help establish the essential infrastructure for the development of a particular country. These programmes include in particular the "travaux au ras du sol" tried in Madagascar and the "programme de promotion nationale" in Tunisia.

38. Although confronted with various problems of unemployment and under-employment, African countries are no less concerned with improving productivity in the rural areas as in the towns. Thus in many countries, training programmes for adults are designed to teach them modern production methods and techniques. More particularly, in several African countries rural development centres whose aim is to train the peasant masses have been set up. Similarly, in towns and cities various means such as, on-the-job training, evening courses and "sandwich" courses, have been adopted for the purpose of raising the productivity of workers. Finally, both in the towns and the rural areas the main aim of the struggle against illiteracy is to improve the productivity of adults since literacy makes people more receptive to innovations.

#### B. Educational and training measures

39. The educational and training measures proposed by African countries to overcome manpower and training problems are basically as follows:

- reform of the educational and training system with the aim of adapting it to the needs of African economies,

- according priority to secondary education and, more particularly, technical education, vocational training and the training of teachers,
- intensive application of modern techniques and methods of accelerated training,
- preparation and implementation of manpower-oriented fellowship and training programmes.

40. Most African countries have reformed their educational and training systems so that they will be better suited to meet the needs of local economies. The changes relate mainly to the orientation of the content of the programmes and the duration of primary and secondary school studies. With regard to primary education, the programmes have been revised so that more importance is attached to the study of agricultural disciplines and techniques. There has been emphasis on the "ruralization" of primary education, without in any way creating two separate primary school systems. In secondary education the reforms have consisted of attaching particular importance to the study of science and technology.

41. The skills necessary for economic development are acquired, as we have said, after primary education. Hence the expansion of this educational sector must go hand in hand with a proportional increase in secondary education, particularly technical education and vocational training, including the training of teachers. This principle has led various African governments to accord priority to this level of education as regards the allocation of material and financial resources. In some countries even, specific ratios have been set with regard to the number of pupils to be admitted to the various types of secondary education. This special attention to secondary education reflects the concern of African governments to promote the expansion of technical education and vocational training as a means of rapidly building up requirements of middle and high-level personnel. With regard particularly to the training of teaching staff, most African countries have instituted special programmes designed to surmount the qualitative and quantitative deficiencies of this professional category.

42. But the shortage of teaching staff is only one particular aspect of the general shortage of qualified personnel experienced by all the African countries. Therefore, to overcome this shortage effectively and as quickly as possible, African governments have advocated intensive recourse to the forms, techniques and methods of accelerated training. In particular they have advocated: in-service and on-the-job training, "sandwich" courses and evening courses, the use of audio-visual methods, the establishment of special institutes aimed at providing young people destined for the industrial vocations with accelerated and appropriate training. Similarly, fellowship and training programmes have been instituted to provide qualitatively for the supply of trained manpower at the various levels. Finally, orientation and advisory services intended to inform pupils and students of the state of the labour market have been introduced in some African countries.

ANNEX

THE SITUATION IN INDIVIDUAL  
COUNTRIES

BOTSWANA

1. General information

- Programmes of in-service training, specially designed for public servants.

2. Major manpower and training problems

- (a) Shortage of trained manpower, of the higher and medium levels: in 1965, the number of posts requiring Category I manpower (i.e. persons with a degree or diploma qualification) was about 370, of which less than 10 per cent was occupied by Botswana; the number of jobs requiring Category II manpower (i.e. persons with the minimum educational qualification of the level of School Certificate) was estimated to be 1,600, of which less than one-quarter was filled by Botswana.
- (b) Lack of trained teaching staff:
  - In 1965, of the 1,624 teachers in primary schools, 825 had not received professional training.

3. Critical areas of educational and training needs

- (a) Primary and secondary education: lack of holders of the School Certificate and of the Junior Certificate;
- (b) Training of teachers.

4. Proposed remedial measures

- (a) Absolute priority to be given to expanding secondary education:
  - Increased enrolment in secondary schools, and reduction in the rate of student wastage;
  - Development of the existing secondary educational establishments through the formation of new classes;
- (b) General application of full-time training and initiation of a scheme for in-service training designed for unqualified teaching staff;

- (c) A very marked annual increase in the number of students entering the university;
- (d) Progressive expansion of the Gaberones Training Centre, with priority being given to the long course designed for technicians, and to the training of accountants and officials of the public administration.

Source: Transitional plan for social and economic development, 1966-68

### CENTRAL AFRICAN REPUBLIC

#### 1. General information

- Comprehensive study on the situation, future trained personnel supply and demand;
- Centre for vocational guidance.

#### 2. Major manpower and training problems

- Shortage of qualified administrative and technical staff; the overall needs (new jobs and replacements) during the Four-year plan period are estimated as follows:

Public Sector:	Private Sector:
Group A : 254	Category 8 : 234
Group B : 263	Category 6
Group C : 919	and 7 : 194
Group D : 652	Category 3-5 : 1426

The needs in relation to probable supply during the plan period warrant the following assertions:

- In the public sector the shortfall will be among group A and B workers (203 units)
- The short-fall regarding the private sector affects trained workers, particularly mechanics, refrigeration engineers, radio engineers, plumbers and tile setters.
- Poor qualifications of teachers.

#### 3. Critical areas of educational and training needs

- Technical education;
- Training of teachers.

4. Proposed remedial measures

- Priority to secondary education and vocational training;
- Educational reform for adapting the programmes to the needs of the country, notably the introduction of technological education;
- Increase in the responsibilities of the Centre for Vocational Guidance;
- Establishment in each institution of a documentation centre for informing pupils about various careers;
- Award of scholarships to meet qualified manpower requirements;
- Intensive adoption of accelerated training methods.

Source: Four-year plan 1967-1970.

FEDERAL REPUBLIC OF CAMEROON

1. General information

- A very detailed overall study of the situation of future requirements and availability of trained personnel was undertaken in 1965-1966.
- A Technical Committee on Human Resources exists within the Ministry of Planning;
- An Office of Manpower is responsible for matching supply of, and demand for, trained personnel.

2. Major manpower and training problems

- Shortage of trained staff, especially in the categories of supervisory staff and higher-grade supervisory staff for rural, child and health training.

The requirements and the resources available during the period of the Plan are estimated as follows:

(a) East Cameroon

	<u>Requirements</u>	<u>Available resources</u>	<u>Shortfall</u>
- Trained and highly trained	12,727	12,344	383
- Foremen and overseers	1,870	1,115	755
- Technicians	3,504	2,754	750
- Supervisory and higher-grade supervisory staff	2,133	829	1,304
Total:	20,234	17,042	3,192

(b) West Cameroon

- Trained and highly trained	4,029	3,867	162
- Foremen and overseers	434	367	67
- Technicians	1,196	875	321
- Supervisory staff and higher-grade supervisory staff	519	194	325
Total:	6,178	5,303	875
<u>Grand total:</u>	<u>26,412</u>	<u>22,345</u>	<u>4,067</u>

- Under-employment in the rural areas and the problem of unemployed youth in towns.

- Africanization of qualified staff.

3. Critical areas of educational and training needs

- Special needs for qualified agricultural staff, teachers in secondary schools and institutions of higher learning and qualified sanitary staff.

4. Proposed remedial measures

- Special attention to the development of vocational training, for which the following measures should be adopted:

- Increase in the number of the establishments responsible for such training;

- Widening the scope of specialized training;

- Integrating vocational training more closely with the general educational system.

- In-service training and promotion within a given cadre.

- Accelerated training.

- Making use of technical assistance.

Source: Second Five-year Economic and Social Development Plan, 1966-1971.



## CHAD

1. General information:

- No comprehensive study of the situation and staffing needs; only a survey was made in connexion with the preparation of the Five-year Plan; this survey on the commercial and industrial sector aimed at determining:
  - trained and semi-trained manpower requirements for manual and technical jobs;
  - technical staff required;
  - available jobs in the administrative service and in commerce;
  - level of training required for employment.

2. Major manpower and training problems:

- Overall need of trained staff at all levels;
- Africanization of staff.

3. Critical areas of educational and training needs:

- Primary education: the overall rate of school enrolment should follow the following progression:

<u>1965</u>	<u>1970</u>	<u>1975</u>
26.32%	38.6%	61.5%

- Training of teachers, with needs for the plan period estimated at:

- teachers and pupil teachers:	2,535
- assistant teachers:	495

- Training of middle-level administrative and technical staff.

4. Proposed remedial measures

- Primary education reform particularly the introduction of the rudiments of agriculture into the teaching syllabus;
- Priority to be given to the training of new teachers and refresher courses for senior teachers;

- Strengthening of the teaching and administrative staffs;
- Increasing the rate of successful candidates at the middle-school leaving certificate and the school certificate, from the present 35 per cent to 50 per cent;
- Increase in the training capacity of the technical lycée and introduction of new skills in education;
- Establishment of a vocational and refresher course training centre for industrial and commercial workers;
- Evening classes and other intensive in-service training methods;
- Establishment of agricultural vocational centres as well as rural apprenticeship centres.

Source: First Five-year Economic and Social Plan, 1965-70.

#### DAHOMY

##### 1. General information

- A brief summary of the situation, needs and resources in skilled manpower.
- A "Human Resources Sub-Office" assisted by a "Commission on Human Resources" is responsible among other things for:
  - Defining, stimulating and supervising a national schooling and training policy at all levels;
  - Adjusting the supply and demand of employment in the widest sense of the term.

##### 2. Major manpower and training problems

- The foreseeable excess of qualified manpower at all levels during the plan period.

The picture is as follows:

1,500 B and A level for 900 employment places (Higher School Certificate and above);  
9,000 C level (the primary certificate) for 2,400 jobs;  
60,000 D and E level (with a primary school leaving certificate) for 5,500 jobs;

- Poor qualifications of teaching staff;
- Problem of unemployed youth;
- Unemployment in the urban as well as the rural sectors;
- An excessive amount of public administration officers;
- The irrelevance of the educational system to the needs of national economic growth;
- The high cost of education and training;
- Africanization of qualified staff.

3. Critical areas of educational and training needs

- Qualitative training of teaching staff;
- Agricultural and industrial basic cadres.

4. Proposed remedial measures

- Reform of the educational and training system with a view to adapting it to the needs of the nation for qualified personnel, particularly "giving a rural bias" to primary and secondary education.
- Establishing post-school co-operatives and literacy classes for young people who have already had some schooling, and those who have not had any primary education with a view to providing them with training in agriculture, handicrafts and co-operatives, and give them a chance to practise a skill.
- The progressive limitation of the numbers of pupils in secondary and technical schools, in view of limited job opportunities, in order to stem the tide of unemployment among persons who have had some formal education.
- Staff reconversion through the institution of crash training courses to secure better distribution of civil servants and relieve congestion in the administration.
- A policy to encourage persons in the A level cadres to work outside their country in intra-African organizations and neighbouring countries.
- Increasing the numerical strength and duties of the Human Resources Sub-Office, in order to secure a better conceptual framework, and co-ordination, and a drive towards a comprehensive training policy adapted to the national needs.

Source: Five-year Economic and Social Development Plan, 1966-1970,  
Haut Commissariat au Plan et au Tourisme.

## ETHIOPIA

1. General information (not available)
2. Major manpower and training problems
  - Lack of qualified manpower, particularly higher and middle-level cadres: In EC 1959 (= 1967) the needs of these two categories of qualified staff were estimated respectively to be 1,500 and 8,000 approximately (excluding the agricultural sector).
3. Critical areas of educational and training needs
  - Primary education, vocational and technical education;
  - Teacher training.
4. Proposed remedial measures
  - Priority to be given to technical education;
  - A better balance between general academic education and technical education;
  - Adjusting the period of study, hours of work and educational programmes to secure the required qualified staff for economic development more quickly;
  - Special attention to be paid to more efficient and rapid forms of vocational training: special courses for teaching staff, in-service training within enterprises, workers classes and special training centres.

Source: Second Five-year Development Plan, 1963-1967.

## GABON

1. General information
    - A general study of the needs in qualified staff in the modern sector was carried out in 1963/64 by the Société d'études pour le développement économique et social (S.E.D.E.S.).
- There were several levels of classification:
- (a) Ordinary manpower with no vocational training;
  - (b) Manpower and special employees: technical knowledge and simple skills acquired on the job or short training courses (lasting only a few weeks);

- (c) Manpower and skilled employees: general knowledge of the particular skill (primary school leaving certificate), ability to organize work on simple instructions;
  - (d) Workers and highly skilled employees: industrial or commercial certificate;
  - (e) Supervisory and senior staff: industrial or commercial certificate plus experience of the particular skill required and qualities of leadership;
  - (f) Technicians holding a technical certificate;
  - (g) Executives and higher executives: university level.
- A "Commission for Training and Employment" assisted by a "Scholarship and Training Bureau", is responsible for defining the general training and employment policy.
  - The School and Vocational Guidance Bureau.

## 2. Major manpower and training problems

- Lack of qualified manpower particularly in the industrial sector. It is estimated that the needs of the modern sector by 1980 will be as follows:

Nature of training	Skilled and highly skilled	Supervisory and Senior staff posts	Technicians	Executives and higher executives	Total
Industrial	4,300	875	900	600	6,675
Commercial	2,000	440	400	440	2,280
Agricultural and forestry	140	355	85	110	690
Teacher training	1,800	300	100	100	2,300
Medical and social	520	590	10	130	1,250
Miscellaneous	180	50	110	70	410
<b>Total</b>	<b>8,940</b>	<b>2,610</b>	<b>1,605</b>	<b>1,450</b>	<b>14,600</b>

To the above figures should be added, according to the nature of the training, the following factors which have not been broken down:

- Skilled and highly skilled: 4,000 to 4,500
- Supervisory and Senior staff: 250 to 300

- Poor qualifications of teaching staff; only 11.5% of the teachers satisfy the intellectual requirements of the profession.
- The irrelevance of teaching and vocational training to the national economic conditions.
- The particularly high cost of education, resulting from a high proportion of duplication, coupled with the high rate of wastage.

3. Critical areas of educational and training needs

- Staff in the "skilled and highly skilled" category;
- Teacher training, both primary and secondary.

4. Proposed remedial measures

- General reform of the educational system to make it better adapted to economic needs, and capable of producing better results;
- Revizing commercial and industrial programmes and methods;
- Giving a rural bias to primary education: establishing a "finishing school" to give primary school leavers sound agricultural and artisanal training.
- Increasing and making intensive use of the existing training capacity;
- Promoting established staff;
- Improving a person's knowledge of his job;
- Periodical determination of the numbers required in the various training sectors, and the definition of a recruitment policy;
- Aptitude guidance in accordance with the various levels of teaching provided for in the plan;
- Close co-operation with employers.

Source: The Economic and Social Development Plan, 1966-1971.

## GHANA

1. General information

- A Registration and Placement Centre for unskilled and middle-level cadres;
- Employment and Manpower Division (Office of the Planning Commission);
- In-service training programmes in various institutions.

2. Major manpower and training problems

- Lack of skilled manpower, particularly upper and middle-level cadres: In 1960, only 4 per cent of employed manpower was in upper level employment and 16 per cent in middle-level employment. The skilled manpower situation in 1963 and 1970 was given as follows:

	<u>Employment</u>		New posts required in	Replacement through loss in 1970	Total numbers required in	Percentage in relation to employ- ment in
	1963	1970	1970		1970	1970
<b>(a) <u>High-level</u></b>						
Administrative managerial	13,000	16,000	3,000	3,900	6,900	53
Professional	19,000	24,000	5,000	5,700	10,700	56
Sub-prof. and technical	7,000	19,000	12,000	2,000	14,000	200
Skilled crafts	36,000	52,000	16,000	10,800	26,800	74
Primary/middle teachers	32,000	69,000	37,000	9,000	46,000	143
Secondary/higher teachers	2,000	6,000	4,000	600	4,600	230
Total	109,000	186,000	77,000	32,000	109,000	100 %

	<u>Employment</u> 1963 - 1970		New posts required in 1970	Replacement through loss in 1970	Total numbers required in 1970	Percentage in relation to employ- ment in 1970
<b>(b) <u>Middle-level</u></b>						
Clerical and commercial	43,000	65,000	22,000	15,900	37,900	88
Trade (excluding petty traders)	46,000	69,000	23,000	16,000	39,000	84
Mining	33,000	42,000	9,000	15,000	24,000	72
Transport/comm.	63,000	105,500	42,500	25,300	67,800	107
Semi-skilled craft and oper- atives	156,000	237,000	81,000	58,800	139,000	89
Services	54,000	80,000	26,000	24,500	50,500	93
Total	385,000	598,000	203,500	155,500	359,000	90

### 3. Critical areas of educational and training needs

- Teacher training for primary and secondary schools: 40 per cent of primary school staff are not qualified;
- Executive grades, technicians, workers and foremen;
- Enrolment of science pupils;
- Qualified staff for transport and communications.

### 4. Proposed remedial measures

- Free education in teaching institutes;
- Intensive in-service training programmes;
- Adjusting salary scales in the interest of teaching staff, and increasing the enrolment in teacher training colleges;
- Establishing pre-service training centre;
- Establishing secondary school guidance and advisory services;
- Encouraging employers to organize and implement in-service training programmes for their employees.

Source: Seven-year Development Plan 1963/64 to 1969/70.



KENYA1. General information

- (a) Study of the needs in high-level skilled manpower (period 1964-1970);
- (b) The existence of various training centres and institutions for administrative officers, co-operative staff, community development officers, secretaries, steno-typists, airways personnel, traders etc.;
- (c) Students Guidance Service;
- (d) In-service training plans in industry, commerce and agriculture.

2. Major manpower and training problems

- (a) Lack of middle- and high-level cadres: In 1964 the picture was as follows:

	<u>Posts to be filled</u>
- Professional and executive staff	708
- Technicians and sub-professionals	9,341
- Qualified office staff	1,398
- Skilled workers	453
- Semi-skilled workers	122

From 1964 to 1970 the situation is likely to develop as follows:

	<u>Minimum demand</u>	<u>Total supply</u>	<u>Deficit</u>	<u>% of demand</u>
- Professional and executive staff	5,600	4,600	1,000	17.4
- Technicians and sub-professionals	23,800	19,000	4,800	20.3
- Skilled office staff	17,800	1,800 <sup>a/</sup>	(16,000)	(89.8)
- Skilled workers	7,100	2,200 <sup>a/</sup>	(4,900)	(69.0)
- Semi-skilled workers	2,700	300 <sup>a/</sup>	(2,400)	(88.9)

<sup>a/</sup> The supply is derived entirely from the formal system of training.

- (b) Unemployment and under-employment in urban centres and rural areas;
- (c) Africanization: In 1964 Africans occupied the following percentage of posts:

22.7 per cent of the posts in category A (university degrees and higher qualifications);

75.7 per cent of the posts in category B (university level but without any degrees);

45.6 per cent of the posts in category C (secondary level);

81.5 per cent of the posts in category D (skilled artisans).

3. Critical areas of educational and training needs

- Staff training in category B, mainly primary school teachers, nurses, mechanics, draftsmen;
- Training of staff in category C, particularly stenographers, secretaries, accountants, mechanical operators, telephonists and telegraphists.

4. Proposed remedial measures

- Reconsideration of the university development plan with a view to increasing enrolment, modifying programmes and encouraging students to train for professions in greatest demand;
- Increased supervision by the Ministerial Scholarship Committee of the number and composition of scholarships held abroad, to ensure that the studies carried out by students abroad coincide with Kenya's needs, and that on their return students are employed in posts where the need is most urgent;
- An intensive secondary school guidance programme on careers;
- On-the-job training of executive staff;
- Revision of syllabuses in some secondary schools and expanding the methods and facilities for specialized studies;
- Expansion and closer co-ordination of training programmes in the private and public sectors;
- Intensification of teacher training programmes.

Source: Development Plan, 1966-1970.

## MADAGASCAR

1. General information

- No overall studies on trained personnel requirements: manpower and training problems are dealt with in the plan document under various headings;
- Existence of a Training-Employment Committee entrusted with the formulation of employment estimates and the consequent adjustment of training programmes.

2. Major manpower and training problems

- General shortage of trained personnel at the upper and middle-levels: additional staff needs in the two principal sectors of the economy are estimated as follows:

(a) <u>agricultural staff</u>	<u>1968</u>	<u>1973</u>
- engineers and related workers	276	708
- middle-level workers	326	908
- lower-level workers	717	2,134
- subordinate category (niveau C.E.P.)	2,223	4,494
(b) <u>industrial workers</u> <sup>1/</sup>		
- technical staff	775	922
- employees	1,863	2,179
- trained workers	9,670	12,063

3. Critical areas of educational and training needs

No particular field has been singled out as calling for special attention.

4. Proposed remedial measures

- Administrative training centre (training of middle-level staff for the civil service;
- Training centre for business executives (within the university);

<sup>1/</sup> 1973 data are those relating to the short-term aspect of the plan.

- Training centre for teachers connected with schools for practical rural training;
- Introduction of a short course (4 years) in primary education, designed to create among pupils an awareness of the problems of every day life;
- National Colleges for Public Works, Agriculture, and Administration for the training of higher-level staff;
- School and Vocational Guidance Services; and a Training-Employment Committee.

Source: Five-year Plan, 1964-1968.

#### MALAWI

1. General information (not available)
2. Major manpower and training problems
  - Overall trained personnel requirements in both the public and the private sectors.
3. Critical areas of educational and training needs.
  - Training of teachers for secondary schools;
  - Training of agricultural engineers, administrative officers, and supervisory staff.
4. Proposed remedial measures
  - Establishment of new institutions (certificate level) for:
    - agriculture
    - forestry
    - veterinary services
    - fisheries
    - technical services
  - Establishment of a new agricultural college (diploma level);

- A polytechnic for vocational and technical training;
- Institute of Public Administration - training of senior administrative staff;
- Training college for secondary school teachers;
- Introducing science and technology courses in the secondary school curricula.

Sources: Development plan: 1965-1969.

Economic Report 1966, Budget document No. 5.

Development policies and plans "1965-69", Ministry of Natural Resources.

## MAURITANIA

### 1. General information

- The labour Directorate's Survey on the paid employment situation in 1962, published in January 1963.

### 2. Major manpower and training problems

- Shortage of trained staff at all levels and in all the economic sectors;
- Considerable reliance on foreign staff, hence the problem of Mauritanization.

In 1963 the picture was as follows:

Categories	No. of workers			Percentage of foreigners
	Indigenous	Foreign	Total	
Professional staff	6	173	179	98
Supervisory staff	34	928	962	96
Trained senior staff	137	324	461	70
Trained workers	701	2,003	2,704	74
Other skilled workers	1,102	500	1,602	31
Manual workers	4,415	156	4,571	3

3. Critical areas of educational and training needs

- Middle level workers and skilled workers - among the latter particularly carpenters, welders, plumbers, electricians, mechanics, sheet metal workers and locksmiths.

4. Proposed remedial measures

- Special emphasis on secondary education and particularly on vocational and technical training;
- Educational reform to ensure better adaptation to the economic needs;
- Effective and systematic training programme for the training of skilled workers in various centres such as:
  - National vocational training centre;
  - Rural workers' college;
  - Mining school;
  - Nursing and midwifery training college;
  - National Centre for Administrative Training;
  - Establishment at the Office of the Commissioner for Planning, a Mauritanization Office responsible for:
    - The planning of qualified manpower needs in the various sectors;
    - Formulation of the appropriate remedial measures.

Source: Economic and Social Development Plan, 1963-1966.

MAURITIUS

1. General information

- A survey on manpower requirements and resources has been started
- In-service training programmes within various ministerial departments.

2. Major manpower and training problems

- Unemployment especially in urban areas;
- Under-employment in rural areas;
- Shortage of trained manpower, especially:
  - intermediate technical: supervisors, designers, co-operative officers, assistant-chemists, storekeepers, cabinet-makers, welders, civil engineers assistants, mechanics, electricians, plumbers etc.
  - high-level technicians: civil engineers, geographers, accountants, agricultural-economists, mechanical engineers, surgeons, veterinarians, industrial chemists, electronic engineers etc..

3. Critical areas of educational and training needs

- agricultural trained personnel

4. Proposed remedial measures

- Manpower and educational planning;
- Rationalization of technical assistance;
- fixing priorities in manpower development and utilization.

Source: Mauritius: Economic Planning Unit.

MOROCCO

1. General information

- No comprehensive study on trained manpower situation.

2. Major manpower and training problems

- A shortage of senior staff especially agricultural and mining staff;
- Shortage of teaching personnel (teachers, instructors);
- Moroccanization.

3. Critical areas of educational and training needs

- Training of secondary school teachers especially in technical and agricultural education;

- Staff for the mining industry and shipping; needs in the mining sector are evaluated as follows:

- upper level and technical staff:	386
- supervisory staff and technicians:	559
- trained and professional workers:	116

4. Proposed remedial measures

- Emphasis on secondary education, especially technical and agricultural education;
  - admission of 40 per cent of candidates to the secondary school level;
  - 60 per cent on roll at the secondary school level to be oriented towards technical and agricultural education.
- Introduction of 3 diplomas for technicians, 30 per cent of secondary school pupils to be directed towards these diplomas;
- To strengthen, expand and equip educational institutions;
- Increasing the number of places available in the regional primary teacher training colleges and establishment of teachers' units in selected secondary schools.

Source: Three-year Plan, 1965-67.

NIGER

1. General information

- Office of the Commissioner for Human Development (Office of the General Commissioner for Development;
- Committee for the Training of Workers;
- Technical Office for Training;
- Tele-training Centre.



## 2. Major manpower and training problems

- Overall needs in trained personnel;
- Needs in teaching staff are estimated as follows:

	Primary	Secondary
1/10/64	158	13
1/10/65	210	17
1/10/66	181	25
1/10/67	196	41
1/10/68	229	56

- The requirements for the service in 1968 are estimated at 378 units of B workers (secondary Form. 4);
- 91 units of A workers (School Certificate level and above).

## 3. Critical areas of educational and training needs

- Accelerated increase in the rate of primary school enrolment; target 30 per cent in 1973;
- Training of teachers;
- Training of rural animators and adult education.

## 4. Proposed remedial measures

- Introduction of school television programmes in primary school education;
- Increase in staff and volume of activities of the education bureau to ensure better training of teachers;
- Refresher courses for teachers;
- Establishment of new schools (primary and secondary) and curricula reform;
- Stricter guidance of pupils in accordance with their aptitudes and the needs of the countries;
- Particular attention to training establishments and institution such as:
  - Nurses training college;

- School for animal husbandry assistants;
- National school for administration;
- Training centre for technical workers from the public works services;
- Technical college.

Source: Four-year plan, 1965-1968.

## NIGERIA

### 1. General information

- A survey assessing Nigeria's high-level manpower needs (1963-1970) has been undertaken;
- Ashby report, "Investment in Education", advocated a council for the co-ordination of educational programmes.
- Existence of a national Manpower Board.

### 2. Major manpower and training problems

- Unemployment, especially among primary school leavers: in 1961 some 211,000 primary school leavers were available to be put into gainful employment.
- Under-employment, particularly noticeable in agriculture;
- Over-supply of general labour
- Shortage of trained manpower: the critical area being the intermediate category - supervisors, foremen, executives officers, technical assistants, technologists, craftsmen.
- Problems of instability and poor quality.
- Nigerianization particularly in private industry.

### 3. Critical areas of educational and training needs

- Teacher training;
- Vocational and technical training.

4. Proposed remedial measures

- Well-planned system of education and training including programmes for in-service training by major employing institutions;
- Top priority to technical education and vocational training;
- Special emphasis on technical institutes;
- "Trade centres" and teacher training colleges;
- Encouragement of the use of labour-intensive techniques;
- Special emphasis on Farm institutes and Farm settlement to absorb the unemployed school leavers.

Source:- National development plan 1962-68

- Manpower situation in Nigeria manpower studies No. 1 (Preliminary report)  
National Manpower Board, Federation of Nigeria - 1963.
- Nigeria's high-level manpower 1963-70 - Manpower studies No. 2  
National Manpower Board - 1964.
- A study of Nigeria's professional manpower in selected occupations 1964, manpower studies No. 3 National Manpower Board.  
Federation of Nigeria.

RWANDA

1. General information

- No comprehensive study on the situation of trained personnel needs and supply.

2. Major manpower and training problems

- General shortage of trained personnel in all skills and at all levels;
- Under-employment in the rural areas;
- Problem of unemployed youths;
- Failure to adapt education to suit the needs of the country;
- Low output: High rate of wastage, considerable number of student repeaters;

- High cost;
- Very poor qualifications of teachers: 64 per cent of the staff have not had any teacher training.

3. Critical areas of educational and training needs

No particular field has been mentioned.

4. Proposed remedial measures

- Need to adapt education to the economic needs of the country;
- At the primary level, introduction of elementary courses in agriculture, both in its theoretical and practical aspects;
- At the secondary and technical levels, a better balance in the training of upper and middle-level staffs;
- Improvement of the conditions for guiding pupils; to this end, recourse to:
  - psychotechnical methods;
  - a common machinery for guiding pupils.
- Increase in the number of teachers and facilities for the running of the accelerated training centre;
- Establishment of a training college with the aim of:
  - training teachers for the 1st level of secondary education;
  - improving the quality of teachers;
  - promoting educational research.
- Establishment of a teacher training refresher course centre for primary school teachers;
- Establishment in the Ministry responsible for Planning, a service for Rwandization responsible inter alia for:
  - estimating the manpower needs of the various sectors;
  - checking the relevance of scholarship awards to training targets.

Source: Development Study - provisional plan.

## SENEGAL

1. General information: (not available)2. Major manpower and training problems

- Particular needs of teachers and agricultural skilled staff.  
In 1969, additional needs are evaluated thus:

Category	Education (staff)					Agricultural	Total
	1st level	2nd level	Technical	Miscellaneous			
Senegalese	A	15	45	10	6	87	163
	B	30	282	146	39	236	733
	C	1370	51	81	98	905	2505
	D	70	330	15	81	664	1160
T A	A,B,C, (tech. Assist.)	15	40	71	25	34	185

3. Critical areas of educational and training needs

- Training of rural senior staff and instructors
- Training of teachers for primary and secondary education.

4. Proposed remedial measures

- Priority to general and technical secondary education;
- Special emphasis on the training of teachers for this purpose;
- Establishment of two regional teacher training colleges;
- Development of the National Training Centre for Instructors;
- Providing school equipment and financial resources for the National College for Rural Workers (training of upper-level technicians);
- Courses for promoting work, refresher and reconversion courses;
- Orientation of pupils towards training which meets essential needs of the Nation through a selective policy for awarding scholarships;
- Curricula reform for better efficiency.

Source: Second Four-year Economic and Social Development Plan, 1965-1969.

## SOMALIA

### 1. General information

- A Central Commission for Work, made up of representatives of Government, labour and management, and charged inter alia with responsibility for matters relating to planning, vocational training and collective agreements;
- Study on the situation of existing educational facilities and their future development by a UNESCO team of experts in education planning (1962);
- Study of economic development prospects by "Association Européenne des Sociétés d'Etudes pour le développement" (1962).

### 2. Major manpower and training problems

- Overall shortage of trained personnel at all levels;
- Inadequacy in the educational system;
- Shortage of training facilities both in the general, technical as well as in the vocational fields;
- Particularly high rate of wastage in education (76 per cent).

### 3. Critical areas of educational and training needs

- No particular field is indicated: need to develop all types of education at all levels.

### 4. Proposed remedial measures

- Overall appraisal of current and future trained personnel needs;
- Standardization of the educational system throughout the whole country;
- Curricula reform;
- Establishment of new primary, secondary and technical schools;
- Noticeable increase in school enrolment at all levels;
- Establishment of a training college for primary school teachers and another for intermediate-level schools;
- Organization of training courses for untrained teachers.

Source: First Five-year Plan 1963-1967.

The Manpower situation in Somalia, Somali Republic Ministry of Health and Labour -- Mogadiscio 1965.

## SUDAN

### 1. General information

- No comprehensive study of trained personnel needs: only a summary and partial evaluation was made in connexion with the formulation of the plan;
- Existence of in-service training programmes in various government departments and bodies;

### 2. Major manpower and training problems

- Trained personnel needs at all levels; for the single modern sector of the economy, these are set forth as follows: 1/

('000 persons) Period 1961/62 - 1970/71

	Managerial, professional, sub-profes- sional	Skilled crafts- men, drivers	Semi-skilled, unskilled	Administrative, Clerical, all levels	Total
1. Modern agriculture and forestry	1.3	3.0	345.0	10.0	359.3
2. Industry (manufacture, public utilities, construction)	5.0	22.8	92.7	12.0	132.5
3. Transport, communica- tion and distribution	1.0	13.5	19.0	41.7	75.2
4. All administration, social services, education, others	-	-	-	25.1	25.1
<b>Total</b>	<b>7.3</b>	<b>39.3</b>	<b>456.7</b>	<b>88.8</b>	<b>592.1</b>

### 3. Critical areas of educational and training needs

- No particular field was indicated.

### 4. Proposed remedial measures

- Improved output and quality of primary education;
- Secondary school curricula reform and the introduction of technical subjects;

1/ Replacement needs were excluded.

- Improved cultural and vocational level of teachers; further increase in their number through the establishment of six training colleges for primary teachers, one for teachers intended for general secondary education and another one for sixth form teachers;
- Increased use of in-service training programmes.

Source: The Ten-year Plan of Economic and Social Development, 1961-62 - 1970/71.

#### TANZANIA

1. General information: (not available)

2. Major manpower and training problems:

- Trained personnel needs at all levels; those for the plan period are evaluated as follows:

Class A (Degree level);	3,200
Class B (2 years post-secondary)	9,300
Class C ("O" level; secondary level)	16,000

3. Critical areas of educational and training needs

- Training of Class A personnel - particularly: mechanical engineers, electrical and civil engineers; agricultural economists, doctors and surgeons; chemists, geologists, zoologists and physicians - and secondary school teachers.
- As regards personnel in Class B- special need of skilled industrial technicians and grade A/B teachers.

4. Proposed remedial measures

- More use of indigenous staff;
- Advanced training of unskilled staff through in-service training programmes;
- Priority expansion of secondary education - upkeep of technical assistance personnel at duty station and recruitment of new ones.

Source: Five-year Plan for Economic and Social Development, 1st July 1964 - 30th June 1969.



TOGO

1. General information:

- No systematic study on trained manpower situation; only a rough evaluation of manpower needs was made in connexion with the formulation of the plan.

2. Major manpower and training problems

- Shortage of senior staff particularly in the agricultural sector. It is estimated that in 1970 the requirements in this sector will have increased as follows:

Group A:	34
Group B:	52
Group C:	15
Group D:	77
Supervisory staff:	622

The overall requirements of the country are evaluated as follows:

Group A:	425
Group B:	860
Group C:	2,870
Group D:	4,445
Manual workers:	7,240

An examination of the possible supply position indicates a surplus in Group C staff as compared with the demand for some 2,000 workmen.

3. Critical areas of educational and training needs

- Special emphasis to be laid on the training of rural economy staff.

4. Proposed remedial measures

- Educational reform with the aim of adapting it to the economic realities of the country;
- Restriction in secondary school enrolment and reduction in the number of middle school leaving certificate holders in order to obviate the foreseeable surplus in Group C staff;
- Curricula reform aimed at the introduction of subjects relating to industrial, agricultural and artisanal technology at the first and second levels of secondary school education;
- Raising the level of general instruction for each type of job;

- Organizing refresher courses for established staff;
- Working out a rational manpower planning scheme and setting up a human resources service for this purpose.

Source: Economic and Social Development Plan, 1966-70.

## TUNISIA

### 1. General information

- Comprehensive study of requirements and supply of trained staff was carried out in connexion with the preparation of the "Ten-year programme";
- Labour Exchanges for employment productivity;
- Systematic pupil guidance.

### 2. Major manpower and training problems

- Needs in trained staff particularly middle-level and supervisory staff; future needs during the planned period are estimated thus:<sup>1/</sup>
  - professional staff: 4,500
  - middle-level and supervisory staff 16,500
  - general staff:
    - employees 14,500
    - skilled workers 31,000

These needs in relation to the estimated trained manpower supply warrant the following assertions:

- Supply shows a deficit regarding professional staff needs (- 500), middle level and supervisory staff (-4,500) and trained workers (-3,000);
- On the other hand, there will be a considerable surplus in employees (+ 34,000) whose presence will pose employment problems;

---

<sup>1/</sup> Including additional needs in education.

- Unemployment problem: theoretical deficit in employment by 1968 is estimated at 90,000;

- Under-employment in the rural areas.

3. Critical areas of educational and training needs

- No particular field was noted as calling for special emphasis.

4. Proposed remedial measures

- Special emphasis to be given to middle-level and technical education and to vocational training in this regard:

- 1/3 of the number of pupils to be admitted to the second level, will be oriented towards middle-level education and distributed as follows:

17 per cent in the general section  
23 per cent in the commercial section  
60 per cent in the industrial section

- In secondary education orientation of students in the following percentage:

1st level

- general subjects: 62 per cent
- technical subjects: 20 per cent
- economic subjects: 18 per cent

2nd level

- general subjects: 60 per cent
- economic subjects: 20 per cent
- technical subjects: 20 per cent

- Increase in the staffing of the various vocational training centres such as:

- Electro-technical instruction and training centre,
- General centre for mechanics,
- adults training centre,

- Establishment of new vocational training bodies:

- national labour institute and labour education,
- tailor shop,
- barbers' refresher course training centre;
- women's centre.

- Development of employment services for a better balance in the supply and demand relationship.

Source: Plan quadriennial, 1965-68.

## UGANDA

### 1. General information

Overall survey of upper level personnel situation in Uganda. The study which was conducted in 1963-64, covered all sectors of the economy and all people who have had at least 12 years of formal education or who occupy posts requiring people with such an educational background.

Three categories of trained personnel were indicated:

- Category I : University graduates and related workers (16 years of studies);
- Category II : Higher school certificate holders or Cambridge School Certificate holders with more or less two years of further training; (13 years of studies);
- Category III : Cambridge School Certificate holders (11 years of studies).

### 2. Major manpower and training problems

- (a) Shortage of trained personnel particularly in Category III; the situation in 1966 and future needs are evaluated as follows:

	<u>1966</u> (established)	<u>1971</u>	<u>1976</u>	<u>1981</u>
Category I	3,560	2,620	2,860	3,320
Category II	8,600	12,230	14,960	20,390
Category III	5,230	20,340	23,830	32,340

- (b) Unemployment in the urban centres, especially among the school drop-out youth;
- Underemployment in the rural areas;
  - Ugandanization of employment.

3. Critical areas of educational and training needs

- Science and technology;
- Category III personnel: namely Cambridge School Certificate holders.

4. Proposed remedial measures

- Priority to the development of secondary school education;
- Maximum use of in-service training;
- Increase in the staff of training centres as well as of primary and secondary schools;
- Establishment of small-scale handicraft industries and institution of a system for agricultural settlement for unemployed youth;
- Encouragement whenever possible of the use of "labour intensive" methods;
- Employment of Ugandans in preference to any other, in the various vacant posts.

Source: Uganda's Second Five-year Plan, 1966-1971.

UPPER VOLTA

1. General information

- A survey on educational situation and prospects in Upper Volta was undertaken by UNESCO in 1961, dealing with manpower and employment situation.
- Study on employment trends from 1967 to 1985 by sectors and level of qualifications.

2. Major manpower and training problems

- Shortage of technical personnel of "CAP", "BEI" and "BT" levels;
- Over-supply of clerical and administrative personnel;
- Shortage of high-level agricultural manpower

- Inadequacy of education and training system to meet trained manpower requirements of the economy.

3. Critical areas of educational and training needs

- Industrial and agricultural technical personnel training;
- Improving teachers' professional qualifications.

4. Proposed remedial measures

- Top priority to technical education and vocational training;
- Reorganization of secondary education; establishment of the joint class (6<sup>e</sup> and 5<sup>e</sup>) for various types of schooling.
- Reform of teacher training colleges; special system of teacher recruitment and training.
- Adoption of "scholarship code" and establishment of co-ordinating machinery.

Source: Plan cadre de developpement 1967-70.

ZAMBIA

1. General information

- General study on the trained manpower situation as well as the future supply and demand of skilled workers at all levels;
- Employment and information centres within the labour department.

2. Major manpower and training problems

- Unemployment and under-employment: the latter particularly prevalent in the rural areas;
- Problem of unemployed youth;
- Shortage in trained staff, especially middle-level workers:  
The estimated deficit according to education category appears as follows:

	Total new needs (excluding teachers)	Total additional local supplies from educational and training institutions	Short-fall between additional needs and additional local supplies
Degree level	1,300	450	850
Diploma	2,400	890	1,510
"O" level	9,900	4,800	5,100
Form II	13,650	6,450	7,200
Teachers			
Degree level	700	200	500
Diploma level	1,350	50	1,300
Form II	4,500	5,550	-

3. Critical areas of educational and training needs

- No particular field was indicated.

4. Proposed remedial measures

- Intensive training programme for workers both theoretical (in training establishments) and practical (in-service training);
- Making use of the less skilled workers whenever possible;
- More use of existing qualified workers;
- Recruitment abroad.

Source: First national development plan, 1966-1970.