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INFORMATION PAPER ON TECHNICAL ASSISTANCE
PROVIDED TO COUNTRIES AND TERRITORIES OF
THE ECA REGION UNDER THE EXPANDED AND REGULAR
PROGRAMMES

(Prepared by TAB Secretariat)

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Information Paper for ECA

I. INTRODUCTION

1. This information paper has been prepared for the Economic Commission for Africa. It describes some of the technical assistance provided in the ECA region during 1962 by the United Nations, the Specialized Agencies and the International Atomic Energy Agency (IAEA) under both their regular programmes and the Expanded Programme of Technical Assistance (EPTA). Examples are also given of assistance provided under the OPEX scheme.
2. The projects are presented under a series of subject headings and are based on material provided by the Organizations participating in EPTA. No attempt has been made to provide a complete survey of all technical assistance activities in the ECA region; and examples only have been selected, either because they have some interesting features or because they have reached a stage where a broad evaluation seemed possible.
3. Country-by-country statements of the approved programme costs in 1961-62 of EPTA and the regular programmes, and of the estimated number of experts and fellow in 1961-62 reflect the EPTA programme as approved, including contingency allocations made up to 15 November 1962; those for 1961 represent the EPTA programme as implemented, including all projects financed under contingency allocations. Table IV shows the division of the programme in the region into the main fields of activity.
4. Details of the whole 1961-62 Expanded Programme may be found in document E/TAC/L.223 of the Technical Assistance Committee, and a statement of projects authorized during 1961 and up to 15 November 1962 under the contingency authority of the Executive Chairman, is available in document E/TAC/L.260 and E/TAC/L.286 respectively. The programme planned for 1963-64 is set out in document E/TAC/L.2.
5. In the regional distribution of project costs under the Expanded Programme, there has been a continuing increase in the share of the ECA region, which rose from 17.4 per cent in 1960 to 30.1 per cent in the approved programme for 1961-62. In the 1963-64 programme recently approved by TAC at its November 1962 session, the share of the ECA region is 34.6 per cent. This further rise in the proportion of

EPTA assistance going to Africa reflects the participation in the 1963-64 programme of two additional countries, Algeria and Congo (Leopoldville), as well as some increase in the level of assistance to other newly independent and emerging nations in the region.

6. Voluntary contributions pledged by governments of the ECA region to EPTA have continued to increase, showing growing support. The totals for the last three years and for 1963 are as follows:

1960	:	\$363,746
1961	:	\$511,762
1962	:	\$541,771

These figures do not include the local cost contributions of recipient countries nor the counterpart expenditures related to technical assistance activities. The influence of ECA on the technical assistance operations of the United Nations group of organizations has also been increasingly felt and has been a valuable contribution to the programme.

7. A number of developments have taken place recently in the organization of United Nations technical co-operation. Some of these, which are of particular interest, are mentioned in the following paragraphs.

8. At the end of the current year, the Expanded Programme will have completed its first period under the system of two-year programming. It is too early to give a considered view of its merits and demerits, but the subject will be fully reviewed in the annual report for 1962 of the Technical Assistance Board (TAB) to the Technical Assistance Committee (TAC).

9. The Economic and Social Council, by its resolution 854 (XXXII) approved a new system, known as "project programming", which has taken effect beginning with the 1963-64 programme. Under the new procedure, all projects are submitted for their entire duration and are approved by TAC for a period not exceeding four years. At the same time Agency planning shares and subtotals have been eliminated, giving governments complete freedom to choose projects based entirely upon their own views about priorities.

10. On 19 December 1961, the General Assembly declared the current decade to be the United Nations Development Decade, in which member states and their peoples will intensify their efforts to mobilize and to sustain support for the measures required on the part of both developed and developing countries to accelerate progress towards self-sustained growth of the economy of the individual nations and their social advancement. The main objective is to achieve in each developing country a substantial increase in the rate of growth, reaching a minimum annual increase of aggregate national income of 5 per cent by the end of the Decade. In his report on the subject, the (then Acting) Secretary-General emphasized that the various channels of assistance of the United Nations group of organizations, including the Expanded Programme, must be strengthened if the Decade is to be a success.

11. The Economic and Social Council and the Administrative Committee on Co-ordination have recognized with approval that governments are increasingly using the Resident Representatives as their channel of communication with Participating Organizations with regard to questions concerning the Expanded Programme and, in accordance with a recommendation of TAC, meetings were arranged at the headquarters of each of the regional commissions in 1961/62 at which the officials of the secretariats might exchange views, with resident representatives and with representatives of Participating Organizations; on problems connected with EPTA. It is planned to hold such meetings again in 1963 and in subsequent years. They are attended by the Executive Chairman of TAB and the Managing Director of the Special Fund or his representative, as well as by the Executive Secretary of the Commission concerned.

12. It is confidently believed that this will lead to still closer co-operation between the secretariats of the regional commissions and the Technical Assistance Board, to the ultimate benefit of the countries in all regions, which are receiving technical assistance from the United Nations family.

Examples of Technical Assistance Activities in 1962

(A) Economic Planning and Statistics

The development of technical assistance activities in Africa reflects the awareness of Governments of the vital importance of basing their development programmes on sound information and planning. As work in the statistical field and on natural resources surveys continues to progress, an increasing number of requests is being received for assistance in the formulation and implementation of economic development plans. This work is expected to receive considerable stimulation from the appointment of regional planning advisers to be attached to ECA and from the establishment of the African Institute for Economic Development and Planning. This Institute, through its training and research programmes, will add greatly to the expertise available to national governments for economic and social planning. Its activities will be supplemented by continued assistance to Governments at their request in the forms of expert services and of fellowships for specialized study outside Africa.

In 1962, assistance in economic planning and programming was given by UNTA to nearly a dozen countries and territories in Africa, and much of this assistance is of a long-term nature. For instance, in Libya, the Government's work in planning economic development has received UNTA support for more than a decade and the Government has requested a continuation through 1966 at least. In 1962, two UNTA economists served on this project, the senior acting as Chief Economist of the Development Council, the office which is responsible for preparing the current Five-Year Plan.

Among the more newly independent countries, the Government of Togo has had the assistance of a senior economist since the eve of independence late in 1959. The successive experts occupying this position have helped the Government in the field of economic planning and have advised on various aspects of economic policy. In 1962, for example, the expert assisted in the selection of key projects to be given high priority in the Government's development strategy. The Government has requested the continuation of this project in 1963.

In Somalia, as in Libya, UNTA assistance in the economic field has been addressed in particular to the problem of integrating the economies of the geographical parts of which they are composed. In 1962, UNTA was also requested to send a team of four experts to Tanganyika to advise the Government about the economic implications of Tanganyika's possible participation in an East African federation and about the type of federation that might be adopted. The team consisted of two UNTA experts and two experts seconded from ECA, and discussions were held, not only in Tanganyika, but also in Uganda and Kenya. In its advice to the Government of Tanganyika, the team emphasized the advantages of economic co-operation with other countries and favoured the preservation of the common market in East Africa.

The East African Common Service Organization (EACSO) has requested the services of a high-level economist to advise on economic problems affecting the East African sub-region as a whole. The EACSO has also requested an expert from UNTA to advise and assist in its internal reorganization and in its Africanization.

A recent example of requests to the United Nations for assistance with regard to the economic and other relations among African countries is that made to the Secretary-General of the United Nations by the Government of Senegal and of the United Kingdom on behalf of the Gambia, for a team of constitutional, economic and fiscal experts to lay before the Governments of Senegal and the Gambia the economic and political data on which the Governments and peoples of the two countries could decide what form their future relationships should take.

In the statistical field, UNTA projects are contributing substantially towards helping countries to achieve the long-range objectives of the Statistical Survey of Africa, an activity which envisages the collection, within a five-year period, of the essential economic and social statistics required for planning.

To meet the needs of countries requiring direct assistance in building up and improving their statistical services, a total of 31 UNTA consultants are presently serving in 16 African countries, and are advising on a variety of subjects including the organization of statistical services, population census, vital statistics, sampling, data processing, statistical training, national accounts, external trade statistics and industrial statistics.

In addition, five regional statistical advisers, assigned to the regional advisory service at ECA, are available to countries requiring short-term consultative services in specialized fields. Among the projects carried out with the help of these advisers may be mentioned the first census of the city of Addis Ababa, a multi-purpose survey in Morocco, household budget surveys in Tripoli and Addis Ababa, pilot surveys on household consumption in the Sudan and a labour force survey in Libya. Regional statistical advisers also take responsibility for the organization and conduct of regional group activities such as seminars, working groups and study tours; and when possible give courses in their subjects at the statistical training centres established with UN assistance.

One of the major obstacles to the improvement of statistics in Africa is the shortage of properly trained staff; for this reason, concerted efforts have been directed to the development of training facilities. Full-time training centres have come into operation at the middle level and one at university level. UNTA support is supplied in the form of directing and teaching staff, fellowships and equipment.

Three full-time middle-level centres were established at Achimota, Addis Ababa and Yaounde by UNTA in cooperation with the Governments of Ghana, Ethiopia, and Cameroun. A fourth centre at the middle level is operated independently by the Ivory Coast Government at Abidjan, with UN assistance in the form of fellowships. These centres have just completed their first training session lasting for one academic year (except for Yaounde which commenced operations only in time for a six-month course), having trained 81 students from 21 countries in Africa. Participation of 46 of those attending was made possible through the award of UN fellowships.

A university-level centre is at present in operation at the University of Rabat. Sponsored by the Government of Morocco, this centre provides a two-year course with United Nations assistance. The course which began in November 1961

is being attended by 20 students from Morocco and 20 from Tunisia, the latter on UN fellowships. Facilities at the centre are being provided to accommodate a second group of students for the first year of the next session, to begin in November 1962, and it is expected that UN fellowships will be made available for this purpose to participants from Algeria, Guinea, Cameroun and Mali.

In addition to using the training facilities mentioned above, several countries have requested the provision of UN training experts attached to their statistical offices. In Nigeria, a training officer has been assigned to the Federal Office of Statistics for more than a year; another has been posted to Tanganyika; a third was recently sent to Mali and it is hoped that his services will be shared by Mali and Guinea; lastly, a training officer is shortly to be posted to the Central Bureau of Statistics in Ghana, the intention being that he should divide his time between in-service training and assisting in the teaching at the Achimota centre.

Among regional group activities, experience shows that short training courses provide an effective method of giving training in specialized fields for participants at a sufficiently senior level. In Ghana, a course on population census techniques was organized in 1961, intended mainly to assist persons who would be engaged on similar work in their own countries. During the summer vacation in the same year a course on household surveys was conducted in Libreville, Gabon. This was designed to give French-speaking students, nearing the end of their university training, some additional practical and theoretical experience in survey work before returning to their own countries. Other group activities have been organized to promote the exchange of technical information between countries and to enable methods to be adapted for application under African conditions. These include seminars and study tours.

A Seminar on External Trade Statistics, convened in Addis Ababa late in 1961, was attended by 30 participants from 22 countries. It considered the application of recommendations for the improvement of external trade statistics made by the United Nations Economic and Social Council and its Statistical Commission. Recognizing that the recommendations on the compilation of external trade statistics were designed primarily to increase the usefulness of their statistics to the compiling countries themselves as a basis for policy-making, the Seminar considered ways of applying the recommendations in the African countries so that a regular flow of current data would be available.

A Seminar on Industrial Statistics, held in Addis Ababa in mid-1962, was attended by 18 participants from 14 countries. The purpose of this seminar was to render assistance to African countries in planning and carrying out statistical enquiries relating to industry, with particular reference to the United Nations 1963 World Programme of Basic Industrial Statistics.

Study tours provide a means of demonstrating clearly the practical aspects of many types of statistical collection and processing. Those which have taken place in Africa include one in Ghana to enable persons from other African countries to see work on the population census and post-enumeration survey; another of short duration following the Second Conference of African Statisticians in Tunisia enabled some of the delegates to see local survey work in progress; and a tour which took place in Morocco and the UAR covered survey projects in those countries.

(B) Natural Resources Development and Power

UNTA assistance in natural resources surveys has shown a sharp increase during 1962. Such surveys are a necessary basis for economic planning generally, as well as for the development of projects specifically concerned with the exploitation of the resources involved. Assistance in general mineral surveys and the exploration of specific areas, as well as in the field of cartography as a resource survey technique, was given during 1962 in some fifteen African countries and territories.

Extensive projects in cartography are, for instance, being carried out in Cameroun, Mali, and Somalia. A cartography expert was assigned to the Government of Cameroun for a period of two years to assist the Institut de Recherches Scientifiques du Cameroun in the preparation of regional and national atlases and the training of local draftsmen-cartographers. A request from the Government of Mali for five experts, including a power adviser, a hydro-geologist, and underground water specialist, a cartographer and photogrammetrist is being implemented by UNTA. The expert in ground water development has completed his work, and a cartography expert from the UN Secretariat has visited Mali and surveyed the needs of the cartographic department of the Ministry of Public Works, making recommendations. The photogrammetric and cartographic posts are now under recruitment. In Somalia, four experts have been assigned to assist the National Cartographic Office since 1961 in its organization and operational problems and considerable equipment is being made available to this office. Two experts are at present in Somalia collecting cartographic data, surveying and mapping.

In Upper Volta, a United Nations expert made a comprehensive geological survey of the country and drew up a Five-Year Plan of Geological Research for 1965-67.

In Togo, a mining expert completed a survey of ground water and mineral resources and a preliminary programme for their development. This programme was used as a basis for a mineral resources development project being implemented with assistance of the Special Fund.

The Government of the Ivory Coast is giving high priority to the initiation of a comprehensive programme of natural resources development and has requested UNTA to give assistance in the establishment of a geological

laboratory included in this programme. Provision has been made to make aid available in the form of expert services and equipment.

In Ethiopia, two mining experts of the UN Secretariat visited the country for three weeks and assisted the Government in the evaluation of the possibilities of mineral resources development in the southern part of the country. Their report will form the basis for further work to be carried out with international assistance.

In Gabon, a mining geologist has been assisting the Government in a long-term project for geological and mining exploration. In Madagascar, a mining expert has been advising the Government since September 1961 in prospecting and operation of mineral deposits, particularly alluvial gold. In Tunisia, a geologist has been advising the Government since 1960 on surveys of the extensions of iron ore mineralization in Northern Tunisia, and of phosphate deposits.

In Morocco, a petroleum geologist is advising on petroleum prospecting and exploration. Provision has also been made in the Moroccan programme for three fellowships in petroleum geology. Two Moroccan nationals also attended the seminar on the techniques of petroleum development, held in New York in 1962, to provide senior administrators with information on technical, operational and legal aspects of the petroleum industry. Other active participants came from the Ivory Coast, Libya, Madagascar, and the United Arab Republic.

Utilization and development of water resources in single or multi-purpose projects is of singular importance in Africa and has been the object of assistance by UNTA in a number of African countries and territories, including Bechuanaland, the Ivory Coast, Nigeria, Upper Volta. In Bechuanaland, three experts assisted the Government in the preparation of a hydrological survey project to be carried out with assistance from the Special Fund.

Their report is also expected to result in further activities under the United Nations Technical Assistance programmes. In the Eastern region of Nigeria, a hydrologist was assigned to advise on ground water resources development. As a result of his preliminary findings, drilling of exploratory bore holes by a private contractor in the Cross River Plain is envisaged. The possibility of large-scale drilling is also being studied. In the Ivory Coast, a dam construction expert has been assisting in the completion of the earth dam project in the Bandama Valley.

River resources can, in many instances, best be developed by cooperative efforts of the riparian countries. During 1962, UNTA has begun to assist such cooperative projects at the request of the Governments concerned. Thus the Governments of Mali, Niger, Dahomey and Nigeria, implementing a decision taken at the Hydrologist Meeting of the Niger Riparian Countries, requested UNTA to provide assistance in a survey of the consequences that actual or contemplated projects of the riparian countries might have on the regime of the Niger River. The implementation of this request was entrusted to a consulting firm which has just completed its work and submitted its report which is being processed for early publication.

Following requests from the Governments of Guinea, Mali, Mauritania and Senegal and preparatory work with the assistance of experts of the UN Secretariat, a team of eight experts is being organized to investigate the Senegal River Basin with a view to developing its natural resources for multi-purpose utilization. The water resources and hydro-power experts have already arrived in the project area and other experts of the team are expected to join them shortly.

In addition to giving assistance to multi-purpose river development schemes including hydro-electric power production, UNTA has rendered services to a number of countries in Africa specifically with regard to electric power development and related problems such as legislation governing public utilities and rate policies. In Niger, a hydro-electrical engineer and a power economist completed the field part of a mission on the selection of the best hydro-electric sites on the Niger River. Their recommendations took into account both the technical aspects of the problem and its economic aspects, including possible power demand in the next twenty years.

In Togo, a power expert advised the Government during 1960 on the use of a local Diesel power station. In 1962, two power legislation experts visited the country to advise on legal and tariff problems and on the organization, administration and functioning of the central electric system.

(c) Industrial Development and Productivity.

In Africa, technical assistance in the field of industrial development is still in an early phase. As the newly independent countries need first to survey their natural and manpower resources to serve as a basis for further development including industrial development planning, only a small number of them have so far requested the assistance of experts in industrial programming,

in the development of small-scale industries and in feasibility studies. In other countries, assistance provided by United Nations experts continued on projects established in previous years.

It is expected that activities in the field of industrial development will be expanded in the forthcoming biennium, in the form of general surveys as well as specialized expert assistance resulting as follow-up from these surveys. Regional projects in support of these activities will be drawn up in co-operation between the Centre for Industrial Development and the ECA Secretariat.

Among the UNTA projects in the field of industrial development carried out in Africa during 1962, the following may be mentioned:

An industrial economist advised the Government of Ghana on problems of industrial planning in connexion with the preparation of Ghana's new Seven-Year Development Plan. The United Nations expert drew up primarily the main economic criteria of the programme of industrialization for a developing country, set up indicators showing, in mathematical expression, the various sides and aims of an integrated industrialization plan and their respective values, and on this theoretical basis, he then made a thorough analysis of all the existing and prospective industrial projects, viz., the projects under construction, the projects for which firm contracts had already been signed, and new projects in various stages of negotiation. He grouped all these projects into various categories along the indicators set up in advance, and gave a precise evaluation of each of them. As a result of this analysis, the expert finally made concrete proposals concerning the priorities of the projects, based on techniques of estimating investment requirements taking into account the economic realities of the country, its human, material and financial resources and the possibilities of international assistance. He also analyzed the problems connected with financing the whole industrialization programme and set up a time schedule for the subsequent stages of its implementation having regard to both the existing and prospective budgetary resources of the Government. A follow up of this mission is at present being executed by another United Nations expert.

In Cameroun, an industrial consultant advised the Government on the development of small and medium sized industries. The expert recommended the setting up of small industrial estates providing workshops and common services, and proposed measures for accelerated vocational training. It was also recommended that a number of resource surveys be undertaken to serve as a basis for further industrial development.

In Niger, an industrial engineer has been assisting the Government in determining suitable types of industries which could be readily started or expanded, giving due regard to appropriate production processes, scale of operation and order of priority of industries proposed.

An industrial development expert in Nigeria has undertaken investigations with a view to advising the Government on the establishment of one or several industrial estates for small-scale industries in the Enugu area.

An expert has advised the Government of the Sudan on the production of salt from sea water including methods of improving solar salt production and techniques of production control. Noting the unique features of salt as one of the basic raw materials for industrial development, the expert proposed that a technical and economic survey be made of the salt resources of the Sudan and of the present and future requirements for salt and salt-derived chemicals with a view to recommending the establishment of specific projects in this field.

A programme is under preparation, as an amalgamated project, to three countries in Western Africa, and consists of two phases. In the first phase, a highly qualified expert will review the existing plans of these countries, prepare a survey of prospects for their industrial development, and recommend a programme, priorities and follow-up action. In the second phase, his recommendations will be executed by further experts specialized in various industries and in small-scale industries.

A detailed description of the Productivity and Vocational Training Centre established in 1954 in the UAR will illustrate the ILO projects in this field which have made a significant contribution towards industrialization. After a period of surveys and experimentation, a plan of activity was drawn up for five years starting in July 1956. This Five-Year Plan was included in the general Five-Year Plan of Industrialization by the Government, and the Centre became the Productivity and Vocational Training Department of the newly established Ministry of Industry. The ILO supplied a team of experts under the Expanded Programme to assist in implementing the programme in the fields of productivity, supervisory training and vocational training. Fellowships were made available and some training equipment and documentation were also supplied. The objective is to raise productivity in industry by improving the level of management in general, by introducing modern management techniques, and by training and up-grading skills.

A 1960 survey revealed that more training was needed for the expansion of industry under the second Five-Year Plan of industrialization, especially in such important trades as the metal and electrical trades. As a result, the number of training centres planned increased from 22 to 40, and big industrial enterprises were strongly encouraged to increase their own training programmes. By October 1962, a total number of 22 fellowships were granted under the project.

The first task of ILO experts was to train additional specialists for the Department of Productivity and Vocational Training at institutions abroad or by the experts locally. The team's work consists mainly of Productivity and Management Development, Supervisory Training, Industrial Safety and Vocational Training.

Activity in the field of Productivity and Management Development is directed chiefly towards general management and industrial engineering. Seminars and conferences for managers are organized with a view to acquainting them with the concepts and practices of industrial organization. Courses are arranged in work study, production planning and control, quality control, cost accounting and maintenance. Projects are also undertaken within industry to enable counterparts and members of industry to obtain experience in solving practical problems. By October 1962, the number of participants who have passed through the different courses in Productivity and Management Development was 750. In addition, a large number of top and middle managers participated in conferences, seminars and meetings in connexion with the work.

Supervisory Training under this programme is aimed at raising the standard of supervision in industry, and promoting the acceptance of such training as a management function. By October 1962, the number of supervisors in industry who had participated in courses amounted to 20,000 and 150 safety specialists have been trained. An organization for promoting industrial safety has been founded and considerable improvement has been achieved through it in safety conditions in industry. Accident statistics in many companies now show a considerable drop.

Vocational Training is undertaken for the following skills: fitting, turning, machinery, welding, sheet metal working, blacksmithy, electrical, automotive (including diesel), tool and die making, air conditioning and

refrigeration, maintenance fitting, printing, textile, cabinet making, radio and telecommunications. At present, 2,600 apprentices, 700 accelerated trainees and 100 up-grading trainees are under training, while 350 trained indigenous instructors are engaged in this work.

(D) Transport and Communications

UNTA assistance in the field of transport in Africa during 1962 was concentrated in few countries although in others, interesting requests are being formulated for assistance in the near future.

In the United Arab Republic, assistance in the field of transport and communications continued to occupy a prominent place in the UNTA programme, as it had every year since 1957. In recent years, this assistance has been concentrated on railways, harbours, shipyards and river transport, and coordination of road and rail transport. Most of the experts are provided on short-term assignments for precisely defined technical tasks. Thus the State Railways Organization was assisted during 1962 by short-term experts who advised on the signalling on specific sections of the railway network, on railway track maintenance, and on marshalling yards, while experts in the modernization of workshops, foundry shops, and reclamation yards are being recruited.

As regards harbours and shipyards, an expert in port planning completed a one year assignment during which he advised on the modernization of the harbour of Alexandria and other ports. Another expert is now in the U.A.R. on a short-term assignment to advise on shipyards design and an expert on ship building berths is being sought. Experts on coordination of road, rail and river transport and on transport statistics are being recruited while an expert on highway transport accounting took up his assignment in October 1962.

The expert services in the field of transport and communications are complemented by an extensive fellowship programme to train UAR nationals to follow up and implement the recommendation of the experts. Thus, during 1962, five fellowships were awarded for the study of various subjects in the field of railway operations and maintenance.

In the Ivory Coast, a railway expert was provided to make a preliminary survey with a view to modernizing the Dimboko - Tafié section of the Abidjan Niger Railway.

An interesting joint request of the Governments of Dahomey and Niger for advice on the problems arising out of transit traffic of goods to and from Niger by rail through Dahomey was filled during 1962 by a UNTA/GATT mission of two experts.

In civil aviation, the ICAO project in Ethiopia, which was started in 1951, to provide assistance to develop essential services and to train civil aviation ground personnel to maintain the country's growing air services, continued for the whole of 1962. Provision of advice and assistance to the Department of Civil Aviation, particularly in connexion with work at Addis Ababa and Asmara airports, has remained an important function. During the year additional assistance was given in air traffic control, licensing of flight crew and ground personnel, including aircraft mechanics trained wholly under the project, and in connexion with the operation and maintenance of the country's radio navigational aids and the aeronautical telecommunications network. An aerodrome engineer was also provided to supervise construction work at the new airport at Addis Ababa, now scheduled to be ready early in 1963.

During the year, a meteorological instrument maintenance expert assisted in setting up instrument workshops at Ghana's Accra airport. A legal adviser who earlier in the year assisted with the development and preparation of civil aviation laws in Mali and Mauritania has joined the United Nations in the Congo. A civil aviation adviser has continued to advise the Government of Liberia in the setting up of a civil aviation administration. A mission, consisting of a civil aviation adviser, a meteorologist and a communications expert, spent several months in Togo before its work was absorbed under bilateral aid arrangements. A civil aviation adviser spent three months in Somalia studying civil aviation requirements; he submitted his report to the Government in May. Experts closely connected with Special Fund training projects in Morocco and Tunisia have continued to serve under the Expanded Programme.

Experts in airworthiness, radio engineering and teleprinter maintenance, provided under inter-regional projects, carried out work in Ghana, Ethiopia and Morocco. Nationals of Congo (Brazzaville), Libya, Madagascar, Senegal, Somalia and Sudan were studying abroad under ICAO fellowships.

A survey of aviation ground services, including services provided by the East Africa Meteorological Department, was carried out jointly by experts from ICAO and WMO on behalf of the East African Common Services Organization.

An economist to survey the air services potential of the same area is being provided through ICAO.

In Africa, in 1962, the ITU concentrated on instructing telecommunications staff in various countries. Experts were sent to Central African Republic, Chad, Congo (Leopoldville), Dahomey, Ghana and Madagascar all of whom are in charge of the installation and maintenance of telecommunications training centres or of the improvement of those already existing. Training equipment was provided to complete the laboratories and demonstration rooms in the institutes. A large number of fellowships were also awarded, and more than seventy trainees were sent to Europe.

In the case of the Congo (Leopoldville) the training was provided in collaboration with a bilateral programme. This aid was in addition to the training already given in Ethiopia and the Sudan and other ITU experts were sent to Togo, Ghana, Senegal and the United Arab Republic to study particular problems about telecommunications in these countries.

(E) Agriculture, Forestry and Fisheries

The Government of Nigeria is anxious to increase paddy rice production. In particular there is a need to increase the yields. Consequently, FAO was requested in 1961 to send a rice expert to Nigeria to set up a research programme to determine the soil and crop nutritional requirements of irrigated rice under different environmental conditions and to advise the Government generally in the culture of rice. Laboratory work started in the beginning of 1962. The expert organised field experiments which included fertilizer applications. The results are not yet available as the expert has been on location for only eight months. The Government has cooperated with the provision of a well-equipped laboratory and reasonably qualified counterpart personnel. This project is the first of its kind in Africa. Rice is a prominent food crop in several African countries and its importance is likely to increase. Thus, this project can be considered as the first of many such requests and it will act as a guide for the conduct of others.

The former assignments of a few FAO experts have led to the use of expert teams in the fields of water resources and irrigation in Tanganyika. In the past, a maximum of 15 experts have at one time participated in surveys of the Pangani, Ruvu and Rufiji river basins. Following these studies, three reports have been published, which are now released for distribution by the Government.

At present there are seven EPTA posts in the field of water resources and irrigation in Tanganyika. Three of these posts belong to an irrigation team which, in cooperation with one Dutch Associate Expert, continues to establish the inventory of the water resources development potential of the country. A fourth expert advises on hydrological studies. Two experts will participate in the training courses given to junior staff of the Water Development of the Government, with which the four other experts are also cooperating. The seventh post covers the field of Water Development Planning and is one of the three posts of a planning team to be attached to the Planning Division of the Government.

The terms of reference of these seven experts give a clear picture of the well-integrated programme of technical assistance in the field of water resources and irrigation. This is an example of the more advanced stage

of EPTA activities, which have already led to the following results: (i) some pilot irrigation schemes investigated by the FAO team are going to be executed under bilateral programmes; (ii) detailed investigation of large river basins will be proposed to the UN Special Fund; (iii) the Government put full emphasis on an extended training programme in hydrology and irrigation.

FAO projects in the use of farm machinery are best illustrated by the work of an expert who, beginning late in 1960, has been advising the Government of the Congo (Leopoldville) on the operation of agricultural machinery on the extensive "paysannats" (settlements) which were falling behind in their farming production due to the withdrawal of foreign technicians and machinery operators. The expert found that the main problem was the lack of training of the Congolese personnel responsible for maintaining the equipment. In a very short time he was able to organize a training centre for Congolese technicians from "paysannats" in almost all provinces of the Congo. The centre was organized near Leopoldville as a separate, completely self-contained unit. Buildings for classrooms, machinery sheds, dormitories, and facilities for board and lodging of the trainees, were put up. The fourth course will be completed before the end of 1962.

This project has been considered as one of the most successful technical assistance undertakings in the Congo. It was the first project that showed that people from the various provinces could be brought to work and live together harmoniously, and from a technical point of view the trained students have already shown, in their practical day-to-day work on the "paysannats", the value of proper training. Many machines are again in working condition, as reported by the Minister of Agriculture in his speech at the closing ceremony of the third course, but lack of spare parts for repair is still a problem.

Early in 1962, FAO sent a food and nutrition policy expert to assist the Government of Libya in the preparation of a food and nutrition policy and programme taking into account the long-term as well as the short-term possibilities. This assignment was characteristic of the different stages of this type of work.

First the expert laid the basis for a comprehensive survey of food consumption and nutrition and familiarized himself with the main nutritional problems in the country and their possible solutions. It was thus found

that although the diet is not exactly poor in quantity, it is low in proteins and vitamins. Because of fluctuation of production due to unpredictable weather, the country has to import more food than it can afford, thus the pattern of the diet is unsatisfactory and based to a large extent on cereals.

The second step, therefore, was to recommend long-term solutions. A set of food consumption targets was established indicating the order of magnitude of the supplies needed to meet nutritional requirements. Out of this estimate has emerged the need to concentrate on high nutrient-yield rather than gross tonnage. The expert also recommended to the Government the establishment of a National Food and Nutrition Committee and drafted its constitution which was subsequently approved by the Government. Other concrete recommendations were to strengthen nutrition education, train more nutrition workers and intensify work in agricultural extension.

A further step consisted of the recommendation, and so some implementation, of short-term measures aimed at the immediate solution of specific nutritional problems. For instance, the expert arranged to obtain seedlings from Taiwan, of different papaya varieties, which were delivered to experiment agricultural stations in the three regions of Libya. Papaya is a good source of pro-vitamin A which is in short supply in the Libyan diet. Noting that consumption of fish is very low in relation to supplies, the expert experimented with and suggested different forms of preparing this food, some of which were quite acceptable to the population. The expert also experimented with a food mixture made of local foods, sesame butter, non-fat milk powder and date syrup, for use in feeding school and pre-school children and pregnant and nursing mothers.

A survey of home economics in Africa with special reference to rural areas was made available to governments and international agencies in 1962, following the survey carried out in 1961 under the Regular Programme. This report is proving useful to Headquarters, Regional and Field officers in assisting governments and the international agencies to plan and implement programmes for women.

A home economist, appointed under NPTA has been assisting a national programme of community and social development for two years in Sierra Leone. This programme will continue with field project personnel under EPTA in 1963/64. The project, which has UNICEF assistance, aims to disseminate knowledge about family nutrition and home improvement in all rural areas of the country, and to involve

women in these activities. It also seeks to coordinate the social development activities of voluntary organizations and missions with those of the government. This is being done through further developing existing training centres and opening new centres for training government personnel and leaders of voluntary organizations.

A regional symposium on the conservation of nature and natural resources in modern African states, called jointly by CCTA (Commission on Technical Cooperation for Africa) and IUCN (International Union for the Conservation of Nature) under the sponsorship of FAO and UNESCO, was held in November 1961 at Arusha, Tanganyika, and was attended by 140 participants from 21 African and 6 non-African countries and from FAO, UNESCO and ECA.

An outcome of the Arusha meeting was a decision to establish a team of two specialists to analyse the problems of wild life conservation and management in Africa, to assess the needs of countries in terms of education, research and administration and to propose the priorities for specific projects and suggest ways and means for their financing and implementation.

Two experts selected by IUCN were recruited and this project then became a joint IUCN/FAO undertaking. The two experts have already visited countries of West Africa which had requested their services and in the second half of 1962 are devoting their attention to countries in East Africa. The progress achieved will then be reviewed by FAO and IUCN.

It is expected that the two-man team will be consulted on many related topics, land use and natural resources policies, wild life management, game legislation, national parks, hunting regulations, education and training, research, the promotion of the tourist industry, etcetera.

The problems of wild life management and conservation are the particular concern of FAO's African Forestry Commission, which has established a Working Party to review existing national policies and investigate to what extent the former London Conventions fall short of the objectives of the new Africa. A meeting of this Working Party is scheduled for 1963, on the occasion of the next General Assembly of the IUCN.

An FAO expert in fisheries is starting work towards the end of 1962 in assisting the Tunisian Government in the application of the fisheries development plan, particularly in the introduction of modern equipment for trawling and fishing with lights. He will be present at the fishing trials carried out on the experimental ship put at his disposition by the Tunisian

administration. These trials aim to obtain the maximum results from this type of fishing and to direct Tunisian fishermen towards the best fishing grounds.

Two UNESCO experts have been assigned to the Nigerian Institute of Social and Economic Research (NISER) of the University College of Ibadan to carry out a survey on social and economic factors affecting agricultural productivity in Nigeria. The two experts were responsible for the preparation of the outline of the survey and conducted, with the help of the personnel of NISER, a series of investigations in various regions of Nigeria.

(F) Auxiliary Services to Industry and Agriculture

The Government of the Central African Republic approached the ILO for assistance in implementing a general study of the co-operative movement in the Republic, with the aim of developing it and emphasizing the need for improving co-operative training and education. Following this request, two ILO experts in the fields of co-operative training and education and co-operative accountancy, respectively, were sent to the Republic in November 1961. Another expert in the field of co-operative development joined the team in April 1962.

Their first task was to help the Government to re-organise the Mutual Societies for Rural Development (Sociétés Mutuelles pour le Développement Rural), which were not giving satisfactory service. After re-organisation, the Societies became more efficient and capable of assuming additional co-operative functions. Besides the local training given by the experts, two fellowships were awarded in 1962 for co-operative studies in institutions abroad. Equipment worth \$5,000 was also provided by the ILO.

In the belief that a sound organisational structure in the field of social policy is indispensable for social progress, the ILO helps countries which are evolving new social and labour institutions through its activities in the fields of labour administration. In fact, special attention is being given to the requirements of newly independent African countries. Advisory missions continue to be sent to various African countries, and training courses and seminars are being organised for officials connected with labour administration.

For labour inspection staff from French-speaking African countries, courses in Labour Administration are organised in Paris by the ILO under the Expanded Programme, with the co-operation of the French Government and the Institute of Advanced Overseas Studies. The first course in Labour Administration took place from 15th February to 11th November 1961. It was comprised of nineteen participants from the following countries: Congo (Brazzaville), Congo (Leopoldville), Gabon, Upper Volta, Mali, Mauritania,

Niger, Madagascar, Senegal and Chad. A second course, consisting of 21 participants, began on 10th January 1962 and ended on 13th October 1962. A third course with 35 participants began on 15th October 1962 and will end on 13 July 1963.

The programme for these courses consists of (a) a theoretical part in the form of lectures given by the professors of the Institute; (b) study travels and visits to enterprises and institutions; (c) practical training in the field of services charged with the application of social laws in agriculture; and (d) practical training usually in France or Belgium, in the field of national labour administration. Participants who obtain satisfactory results during the training are allowed, subject to the approval of their governments, to continue their training with the aim of getting a diploma which assures them of the possibility of entry into the upper levels of labour administration in their countries.

At the request of a number of governments of African countries, a seminar on Labour Administration was held from 27th November to 15th December 1961, in the Congo (Brazzaville), under the Expanded Programme. Participants were African Officials of the highest rank in the field of labour administration of those countries. The following fifteen countries sent one representative each: Cameroun, Central African Republic, Congo (Brazzaville), Congo (Leopoldville), Ivory Coast, Dahomey, Gabon, Guinea, Upper Volta, Madagascar, Niger, Ruanda Urundi, Senegal, Chad and Togo. Three expert officials of the ILO and an expert from Tunisia also participated at the seminar. The theme of the seminar was "Practical Problems of Labour Inspection". The seminar also examined various national practices in matters of labour inspection and administration. A similar seminar for the English-speaking African countries has been held in Freetown, Sierra Leone, in November 1962.

Late in 1961, as a result of the desire of the Government of Sudan to establish a meteorological observatory at Khartoum, where geophysical observations related to meteorology might be made, a WMO expert was assigned to advise in the establishment of such an observatory and to train local personnel who were to be employed in the observatory.

Since the commencement of training, thirty-five Sudanese have been trained at various meteorological levels, and the necessary equipment for the installation of a small but efficient geophysical observatory has been ordered.

In 1962 as a result of the request of the Ethiopian Government, two WMO experts were sent to Ethiopia to assist in the development of its Meteorological Service as a whole and in the installation and utilization of certain rawind types of equipment in particular. Emphasis was placed on improving the aeronautical meteorological services since the impact of increasing air traffic, including that of jet transportation, made it imperative for the Government to accelerate its meteorological programme.

During the latter part of 1962, plans were being drawn up to furnish the country with a guide to be followed for the following four years so that at the end of the five year period Ethiopia would have a small but efficient Meteorological Service which would serve as a nucleus for the establishment of a service capable of fulfilling all meteorological needs.

December 1962 saw the termination of a WMO mission which began in Libya in 1953. The purpose of the mission was to advise the Government on the establishment of a National Meteorological Service. In 1957 a law was passed formally establishing the Service as a Department of the Ministry of Communications. The expert who was also responsible for specialized training in the field of meteorology, evolved a plan by which selected Libyan students would be sent to universities abroad for scientific studies. In October 1960, the first Libyan science graduate joined the Meteorological Department, having graduated from the Faculty of Sciences of the University of Cairo, United Arab Republic. In 1961, one of the first graduates of Libya's own Faculty of Sciences joined the Meteorological Service and was awarded a WMO fellowship for continued training. Five prospective meteorologists are now studying abroad and two graduates of the University of Libya are expected to join the Service in 1962.

The WMO mission in the field of training in Tunisia continued throughout 1962 with the primary objective of training meteorological observers and technical assistants.

The following African countries have benefited by WHO fellowships in 1962: Cameroun, Congo (Brazzaville), Dahomey, Ethiopia, Guinea, Ivory Coast, Libya, Madagascar, Mali, Niger, Senegal, United Arab Republic.

(G) Public Administration

UNTA projects in the field of public administration are being developed in Africa, as elsewhere, in accordance with the requests of Governments. To supplement country projects and to provide help with public administration problems that are similar in many countries, programmes of public administration are also being developed either as part of the work of the Economic Commission for Africa or with its close collaboration and guidance. Experts in various aspects of public administration are therefore being provided on three levels, at Headquarters, in the region as a whole, and in the countries themselves.

Regional consultants and advisers in public administration are being attached to the secretariats of all the regional commissions and, in the ECA region, the first of six regional advisers was appointed, while by the end of the year others were in process of appointment.

The first task of those advisers was the support of the seminar on Urgent Administration Problems of African Governments in October 1962. That seminar, brought together at ECA participants from seventeen governments of the region, experts in various fields of public administration, and representatives of United Nations Specialized Agencies. They examined systematically urgent administrative problems in the fields of governmental organization, personnel administration and training, local government administration, and financial administration.

The report of the Seminar provides a useful guide for developing programmes at various levels to deal with the more urgent problems in the field of public administration. It provides an outline of a comprehensive programme, determined in large measure by the participating Governments themselves, for the fuller utilization of available regional and international resources to strengthen the administrative support of national development.

This seminar and others scheduled during the year demonstrated the utility of regional approaches to common problems of public administration. For instance, the Seminar emphasized the need for regional cooperation in solving problems of customs administration, which was discussed earlier

in the Report of the Working Committee on Customs Administration in West Africa. Similar seminars or workshops on other subjects, such as local government administration and government purchase and supply, are to be scheduled in collaboration with ECA.

Several African Governments, notably Ethiopia, Ghana, Libya, Sudan and the UAR, have already embarked upon extensive practical programme of in-service training of public officials, utilizing national institutes of public administration that have received assistance from UNTA over a period of years. Some of these training institutions, as for instance in the UAR, have recently become practically self-sufficient and are offering opportunities and services to neighbouring states in the region. All of them are initiating a programme of systematic exchange of training experience and research or teaching materials. Similar institutions with an emphasis upon pre-entry training have been developed in French-speaking states of Africa. New national institutes, and possibly some of a sub-regional character, may emerge in the next few years, with the aid of technical assistance under the guidance of ECA.

This trend in establishing and strengthening institutes of public administration in widely separated parts of the region is supplemented by special training programmes, conducted within the Institutes or as separate undertakings for those officials concerned with, e.g., public budgeting, customs administration, rapid urban growth and agricultural administration.

Other types of training programmes for public officials that may or may not develop into institutes are to be supported by technical assistance at the request of the Governments of Dahomey, Kenya, Niger, Rhodesia and Nyasaland, Cameroun, Uganda, Upper Volta and Somalia. These country projects range from training in specialized fields such as office management to those of a broader character embracing the wider scope of the functions of local government officials. These country projects of technical assistance are in turn supplemented by training abroad on fellowships in public administration. Such fellowships have been requested notably by the Governments of Ivory Coast, Sierra Leone and the UAR.

Increasing concern with the administrative problems that stem from the actual structure of the administrative agencies of Government was brought out in the report of the seminar. Further evidence of this concern is seen in the comprehensive efforts toward improving government organization that are already under way in Morocco, Somalia and the UAR.

Recent requests received by UNTA from Ethiopia, Niger, Uganda and the UAR indicate the growing interest in technical assistance in local government and provincial and district administration. A worldwide study of Decentralization for National and Local Development, soon to be issued by the United Nations, may be useful to Governments and experts alike in this field. Another study in "Central Services to Local Authorities" made by the International Union of Local Authorities for the United Nations, goes more deeply into the organization and functions of central agencies and institutions for the improvement of local government and provides a useful basis for discussion at regional seminars for senior officers of ministries of local government. The United Nations Inter-municipal Technical Assistance Programme, established in collaboration with the International Union of Local Authorities, enables cities in developing countries to obtain the services of experts or special training for their officers from cities in other countries.

In addition to providing advisory services in public administration, The United Nations has filled requests during 1962 for personnel to carry out operational or executive functions as contemplated in General Assembly Resolution 1256 (XIII). This resolution authorized the United Nations, beginning in 1959, to supplement technical assistance programmes in the field of public administration by securing on a temporary basis the services of well-qualified personnel to perform duties of an operational or executive character, as the servants of governments (OPEX). Such posts were not limited to the fields of activity normally the concern of the United Nations, but can extend to the fields of the specialized agencies also.

During 1962, posts have been established in East Africa (for the East African Common Services Organization) in Ethiopia, Ghana, Ivory Coast, Libya, Niger, Nigeria, Somalia, Sudan, Tanganyika, Togo, Tunisia and Uganda. These OPEX posts, totalling 47, cover meteorology, public finance, economic development, national pensions, personnel administration, agriculture and animal husbandry, statistics, telecommunications, industrial training, civil aviation, land valuation, judicial administration, police administration, public works, stores administration, geodetic survey, land and water use, forestry, treasury administration, hydrology and fisheries. Twenty-eight appointments had been made by the end of October 1962 and others were expected before the end of the year.

A number of countries have sought technical aid from the ILO to deal with a shortage of skilled clerical workers, which is a general obstacle against which practically all developing countries in Africa have to battle in setting up an efficient public administration. As an example, at the request of the Ethiopian Government, an expert in clerical training was sent by the ILO to Ethiopia in July 1961 under its Regular Programme. Having determined the specific needs for improving the occupational skills and the practical knowledge of standard procedures among the clerical staff of the ministries and Government agencies, he advised the Government on the organization of in-service training, the choice of subjects, methods and content of training, and measures to be taken to improve the general standard of education and training of clerical staff.

The expert is now setting up, not only a complete system of in-service training for the clerical staff of the different public administration departments in Addis Ababa, but also a system of job valuation in clerical occupations and a commercial teacher training programme, and he is preparing the way for a system of correspondence courses for clerical staff in the provincial administrations. Special courses for training future commercial teachers started in the autumn of 1962.

There are practically no Amharic text-books in the field of business yet almost 95 per cent of all Government employees speak only Amharic. The ILO expert, assisted by others, has designed an Amharic shorthand system.

He is also preparing text books in Amharic and English correspondence, and a book-keeping manual specially for Ethiopians. Furthermore, the project has led to the creation of a national committee responsible for all matters regarding the development of clerical training.

(H) Public Finance and Financial Institutions

Requests from African Governments received by UNTA during 1962 indicate that there is an increasing recognition of the role of fiscal and financial measures in the stimulation of economic growth. The nature and characteristics of the assistance provided reflect their preference for long-term and institutional reforms instead of temporary or sporadic solutions.

The technical assistance rendered by UNTA during 1962 has ranged from an overall and comprehensive examination of a country's fiscal situation in relation to economic development to the provision of assistance in training and of operational research and advisory services, in the fields of budgeting, taxation and finance (credit, banking, etc.). The assistance was asked both at the working level and at top level in advisory functions. An example of the latter is found in Togo where the UNTA expert has become economic adviser to the President and is engaged in the formulation of general economic and financial policy, and also with the formulation and execution of a programme of development.

The projects of wider import related to broad questions of policy in the fiscal and financial field. For example, in Dahomey a UNTA expert is currently in the field on a six-month mission to survey the Government's present expenditure programme and tax structure and to advise on a fiscal and expenditure policy designed to promote economic development. A similar project was concluded in Cameroun in early 1962. Of particular interest in this category were requests for assistance with respect to the fiscal aspects of the problem of newly independent countries and of considerations relating to regional economic groupings. The independence of Somalia was followed by a request from that country for expert assistance in the preparation of an integrated budgetary system and that country continues to receive assistance in the integration of the financial administration of its two regions as well as on fiscal policy problems.

As regards the sub-regional economic groupings, the expert team which visited Tanganyika during the summer of 1962 to advise the Government on the economic and financial implications of joining the proposed East African Federation included two fiscal experts. Similarly the expert mission requested by the Governments of Senegal and Gambia to lay before them the data on which

a decision could be based concerning the form which the future relationships of these countries should take, will include a fiscal expert.

In the field of budgeting, the projects relating to training and accounting reforms were most important. The usual motive in seeking assistance in these fields is to modernize budget management so as to lend effective support to planning. Assistance in training local staff in modern methods of financial administration has been given to Cameroun and Sudan. The expert provided to the U.A.R. is engaged particularly in giving courses on programme and performance budgeting and in developing the work on budget reclassification. His association and close working relationship with the National Institute of Planning in U.A. R. lends further support to considerations of integrating budgeting and planning.

The UNTA projects in the accounting field are of particular significance. The attempts at modernizing budgetary systems have brought into sharp focus the need for accounting reforms. It is being increasingly recognized that government accounting must serve as a tool of efficient budget management. Requests for assistance from Mali, Somalia and Togo to initiate work in this direction were met during the year. In all these countries, work on extensive accounting reforms is in progress. The Secretariat is now undertaking an exploratory study reviewing the work of the United Nations in the field of government accounting with particular reference to the information contained in the reports of the technical assistance experts. This may subsequently provide a basis for the preparation of a manual on this subject which may serve as a guide to developing countries in improving their accounting systems.

In the field of taxation, problems of revenue administration are of great importance. The African countries are desirous of strengthening and coordinating their revenue services and improving the efficiency of tax collection by solving problems such as tax fraud and evasion. Assistance along these lines is being provided in Ethiopia. Mention must be made of the importance of customs revenue in several African countries. The excessive dependence on these taxes has naturally brought in requests for assistance in improving the administration of these taxes and in assessing their effects on domestic income and production. Such assistance was given, for instance, to Togo.

In the field of financial and credit policies, the natural emphasis has been on developing new sources of finance and in ensuring the efficient use of available resources. One of the significant developments was in Niger, where assistance was sought to advise the Government in determining the most appropriate institutions and legal and administrative framework to expand domestic credit facilities, both rural and urban, for the financing of economic development. Another important category of UNTA projects related to balance of payments problems. An expert is advising the National Bank of Somalia in the preparation of the national balance of payments and on the training of local personnel. Assistance is also being provided to Ghana to advise the National Planning Commission on the impact of its prospective plan on the foreign exchange resources of that country.

(I) Health

In Liberia, a WHO project in environmental sanitation started as a fly control project in 1958, following the request of the Government to WHO for assistance in a programme aimed particularly at eradicating this insect in Monrovia. The first programme lasted three years and dealt with only one main aspect of the sanitation problems.

On the recommendations of WHO, a modified programme was proposed, namely, an environmental health scheme devised to promote general sanitation in the country by giving consideration to a national environmental health programme which would include the training of additional sanitation personnel, the development of a Division of Environmental Health within the Ministry of Health and the actual execution of a pilot sanitation project which would be developed in connexion with the training programme.

Emphasis had also been given to the provision of safe and adequate water supplies to Liberia. In this regard, a WHO short-term consultant, with great experience in the management of water supplies, visited Liberia for the purpose of advising the Government on the administration and management of the Monrovia water supply system. His main recommendations concerned the re-organization of the Monrovia water department, as an autonomous authority, which would include both the water and sewage systems of the city.

WHO is providing a sanitary engineer and a sanitarian for this project under its regular budget. It is also envisaged that, on the request of the Government, WHO will provide engineer-manager, financed from the Community Water Supply Special Account, to assist the Government in the implementation of the recommendations of the WHO consultant. WHO may also finance the preparation of preliminary engineering studies and a feasibility report, as well as a loan application report to be submitted to interested financing agencies.

As regards the demonstration zone, which will be the first step towards the eventual development of a national programme sanitation for Liberia, it may be noted that UNICEF is willing to give material assistance to the project by providing equipment and supplies with a view to carrying out practical sanitation activities in the pilot zone. It is expected that this project

will develop rapidly as much in the field of general sanitation as in water supply.

The Higher Institute of Nursing at Alexandria, UAR, has achieved in large measure its aim of preparing professional nurses of a calibre that will progressively, as their numbers increase, affect the quality of nursing education and consequently of nursing service. This has occurred particularly in the United Arab Republic and Sudan; but the impact has been felt throughout the Region, as it serves to interpret professional nursing and to demonstrate that sound educational policies for nursing students are fundamental to creating professional nurses, without whose assistance health services cannot even approximate to the objectives established by Governments.

This project is in its tenth year of operation, and one hundred and ninety-one young women are at present enrolled at the Institute. Since the first graduation in 1959, sixty-seven have completed the requirements for the Bachelor of Nursing degree, five from the Sudan, one from Syria and the rest from the United Arab Republic. Two have received Master of Arts degrees from Universities in America and thirteen are at present on fellowships granted by the Rockefeller Foundation, the Government of the United Arab Republic and WHO.

The curriculum has been enriched to prepare nurses more adequately for leadership responsibilities by including an introduction to Research, Supervision and Administration. Midwifery has been removed from the basic curriculum and a post-graduate programme prepared for this speciality.

Four WHO nurses continue to give guidance to the programme, and with twelve demonstrators (graduates of the Institute), two professional nurses and four Hakimas provided by the Government of the United Arab Republic, as well as administrative and clerical staff, carry the main burden of the programme. UNICEF has provided approximately \$10,000 worth of equipment and have plans to provide more in aid essentially for the improvement of clinical practice areas.

A public health project was developed in Kenya with the object of providing experience in team work for the increasing numbers of auxiliary health

staff being trained for rural health programmes. In the early days of the development of health services, such training was provided on an ad hoc basis by the attachment of health staff as personal apprentices to district medical officers of health. There was also a need to review health centre practice; to develop a satisfactory system of family health records; to promote field research and epidemiological studies; and to develop a comprehensive pattern of family and child care services.

WHO provides the services of an advisory team, including a public health officer, an MCH officer, a public health nurse, a health inspector-tutor and an orthopaedic specialist. While UNICEF will provide certain basic equipment, supplies and transport, the Rockefeller Foundation is contributing towards the capital cost of the scheme as well as providing a statistician. In addition to assistance being provided for the development of health services and for the promotion of field studies, the plan also provides for aid to approved societies working in coordination with the Government in the development of social services for children.

The development of interrelated health and social services here must be regarded as an event of great significance. Comprehensive programmes of this nature, where they are possible, may be expected to constitute the pattern for future child care activities.

In 1961, Tanganyika requested four public health nurse educators to assist in the training of health nurses (an auxiliary grade of public health nurse). They were recruited by WHO in 1962. In the meantime, the Government drew up a new plan for nursing education, deciding to discontinue the training of health nurses. The new programme consists of a three-year course in general nursing, with integrated public health and elementary midwifery, for students with a minimum of eight years' basic education. The training is given in both Dar-es-Salaam and Tanga. In addition, a fourth year of training will be given to nurses having completed the three-year course, and having a background of ten years' basic education, together with those of less education showing exceptional promise, in more advanced midwifery and public health. This fourth year will be given in Dar-es-Salaam only.

One feature in this programme, which indicates a very important trend for any country in Africa, is the inclusion of public health and midwifery in the basic preparation, in order to produce the urgently needed polyvalent nursing personnel at two levels. WHO fully supports this new programme and the four WHO public health nurse educators already recruited, have the qualifications and background required for it.

In 1952, the Government of Ethiopia, on the suggestion of WHO, requested the establishment of a training centre for various types of auxiliary health workers, including health assistants, auxiliary public health nurses (community nurses) and sanitarians. The project was started as a joint WHO/UNICEF/US/ICA activity. The Director of the project was nominated by the US Government and appointed by the Government of Ethiopia as Provincial Medical Officer for the province of Begelemir, and director of the public health training centre. His deputy director was the WHO team leader. A technical advisory committee of the Ministry of Health and the two other cooperating parties was set up. In 1954 the training commenced at Gondar. WHO and US/ICA provided teaching staff and UNICEF provided equipment. The first course took in 30 student health officers, for a three year course, and was followed in 1959 by a two-year course for community nurses and in 1956 by a one-year course for sanitarians.

This project has steadily continued to produce health workers in each of the above categories. As a result of experience, certain changes have been introduced and a postgraduate one-year internship has been added to all three courses. In 1962, the period of training of sanitarians has been raised from one to two years, plus the internship.

Courses in laboratory techniques, community midwifery and instruction for dressers and peripheral health workers have been added to the programme. A further change is the transfer of the College from the administration of the Ministry of Health to constituent membership of the Haile Selassie University in Addis Ababa. One effect of this decision is that health officer graduates are awarded a university degree in hygiene at bachelor level which will allow certain of the graduates to be accepted for postgraduate training abroad in special subjects.

The buildings and equipment of the College are adequate and modern. There is a specially well set up hospital, and a hospital and public health laboratory. In the area used for field work, modern health centres have been established and are in full operation, and well attended by the local population.

Since its inception, the College and Health Training Centre at Gondar has trained 91 health officers, 58 community nurses, 76 sanitarians, 6 community midwives, and 8 assistant laboratory technicians; thus a solid nucleus of essential workers in public health have been provided and for many years will carry the main burden of rural health work in the country. Of the 91 health officers, no fewer than ten have been selected to go for professional medical training abroad, and three health officers, one community nurse and one sanitarian have been sent abroad for preparation as instructors. The WHO contribution has been in the form of staff, and to date 15 teachers have been provided, both medical and paramedical.

The project has been remarkably successful in the achievement of its objectives, but the effect has been much greater in that, through its graduates, it has introduced the practice of public health to rural areas and has created a demand for more such services among the people. Further, the quality of the training is such that the College and Health Training Centre at Gondar could well serve as a model in other countries and as a centre for training and experience for certain of their personnel.

A project in Public Health Administration was started in Togo during 1960, to make a study of the public health services of the country and to prepare a public health programme covering from five to ten years. WHO is providing a medical officer and some supplies.

The WHO Medical Officer, for the purposes of his survey of the existing health services, has set up a statistical service with a view to improving the output of the health services. Stress was laid upon more and better personnel, improved laboratory services, the development of sanitation and the health education of the population. During the survey, it was discovered that the public was not deriving all the benefits it could from the services

provided by the different health establishments. A health education pilot project was therefore launched.

In the same field, a school health seminar for a group of teachers was organized in 1961 with the object of drawing their attention to the contribution they could make, in collaboration with the health organizations, to safeguard and improve school children's health.

With the help of the WHO medical officer, an information service was set up in the Ministry of Health. In this context, a WHO short-term consultant drew up a clearly-defined health education programme for the Togolese population. The WHO Public Health Administrator, in addition to coordinating the activities of the various WHO projects in the country, ensures coordination of WHO activities with UNICEF and the UN and assists the Government in co-ordinating bilateral assistance in health.

The results of this project have been very encouraging. Much epidemiological and sociological data have been collected and, moreover, social medicine is occupying a steadily increasing place in the thinking of the Ministry of Public Health. A five-year plan for the organization and development of the health services is being drawn up.

This is only one of several similar projects being carried out in Africa. in accordance with the Fifteenth World Health Assembly's resolution on continued assistance to newly independent states. It may be noted that the programme of the World Health Organization envisages the elaboration of a national health plan in each of the newly independent and emerging States, related to the current and projected socio-economic development of each country. This planned development of basic health services acquires even more significance in Africa since the biological and other environmental factors affecting health have been traditionally so inimical to the well-being of the African people and have considerably hampered their agricultural and economic development. Such a plan involves the study and investigation of health needs in terms of building facilities, equipment and personnel, with a view to determining the priorities for action and the most economic and efficient ways for implementing it. The plan serves as a guide for developing

and strengthening the necessary health services, for making the required adjustments in its implementation and for eventually assessing achievements. Moreover, it will help international and other outside agencies to concentrate their assistance on nationally established priorities, thus ensuring that the resources available have a maximal benefit.

The first version of the report, dated 1970, was prepared by the National Development Commission and was intended to be the first of a series of reports on the development of the country. It was published in 1971 and was the first of a series of reports on the development of the country. It was published in 1971 and was the first of a series of reports on the development of the country.

The first of these was the fact that the United States had a large surplus of goods and services, which it was willing to sell to other countries at a low price. This was done in order to help them get on their feet after the war. The second was the fact that the United States had a large surplus of money, which it was willing to lend to other countries. This was done in order to help them get on their feet after the war. The third was the fact that the United States had a large surplus of technology, which it was willing to share with other countries. This was done in order to help them get on their feet after the war.

(J) Education

On the eve of the independence of many countries in tropical Africa, the educational position of the continent was noted by the Conference of African States, called in Addis Ababa by UNESCO and ECA in May 1961, to be:

Primary Education attendance	40% of the possible total
Secondary Education	3% " " "
Higher Education	0.2% " " "
Adult Literates	100 million. " "

The most serious obstacle to the economic and social development of the continent was thought to be the low level of secondary education, the unsuitable curricula and content of education and the high rate of wastage at all levels of education. In this context, the Conference decided that the priorities for action by Member States and Associate Member States of Africa, with the cooperation of UNESCO, ECA and other UN agencies, should be planning of education, training of teachers - particularly for the rapid extension of second-level education, and reform and adaptation of curricula.

A twenty-year plan, 1960-1980 was decided upon and the costs of financing estimated. The decisions as to educational targets may be summarized as follows:

	<u>Percentage Attendance By:-</u>			
	<u>1961-62</u>	<u>1965-66</u>	<u>1970-71</u>	<u>1980-81</u>
Primary	40 per cent	51 per cent	71 per cent	100 per cent
Secondary	3 per cent	9 per cent	15 per cent	23 per cent
Higher	0,2 per cent	0,2 per cent	0.4 per cent	2,0 per cent

The cost of this programme was estimated to rise from \$590 million in 1961 to over \$1 billion in 1965 and \$2,600 million in 1980. The African countries decided to increase their investment in education from 3 per cent of the national income to 4 per cent by 1965, 5 per cent by 1970, and 6 per cent by 1980. As against this increasing national effort, they called for foreign aid rising; from \$140 million in 1961 to over \$900 million in 1970, and falling to \$400 million in 1980, after which it would no longer be needed.

The plan was approved by UNESCO, the Economic and Social Council, the General Assembly of the United Nations and the Economic Commission for Africa, all of whom called upon member states of the United Nations to provide financial aid to the African countries in accordance with the plan.

The implementation of the plan during 1962 and 1963 was the subject of a second conference of African countries called by UNESCO and ECA, in March 1962, in Paris. The educational programmes of each of the 36 countries for 1962 and 1963 were subject to detailed examination at this meeting. It was noted that 27 African countries were engaged, with the aid of UNESCO, ECA and other UN agencies, in drawing up long-term educational plans consistent with the Addis Ababa Plan. Secondary education was being rapidly expanded, and UNESCO, with the assistance of the United Nations Special Fund, was establishing a network of 12 higher teacher training institutes in Central Africa. Two regional centres for the training of teacher educators in Africa were also being sponsored by UNESCO.

Most African countries had accepted the Addis Ababa decision to invest 4 per cent instead of 3 per cent of their national income in education. The Conference called upon the other countries to take similar action, to study ways and means of lowering the high cost of secondary education, and to embark urgently on programmes of reform and adaptation of curricula. The first African seminar on reform of secondary education curricula had been held already in Madagascar, and a long-term programme of action for change and adaptation by the African countries, through a Commission of African Educators, was decided upon.

The Paris meeting made three further recommendations: first, the African countries were requested to intensify their efforts to carry out the priority recommendations for the development of education in their countries. Second, the assistance required for 1962 and 1963 for Central Africa, as calculated at Addis Ababa, was broken down between 26 countries which needed financial aid to reach the Addis Ababa targets during 1962 and 1963. Thirdly, a permanent Conference of Ministers of Education was recommended. It was to meet every two years to assist countries in the implementation of the plan and to review its targets and techniques. UNESCO was asked to provide the secretariat, in cooperation with ECA.

The higher education part of the Addis Ababa plan was the subject of detailed and intensive study by a Conference on the Development of Higher Education in Africa, called by UNESCO in cooperation with ECA, in Madagascar in September 1962. The Conference, working within the framework of the Addis Ababa plan, developed a programme for the development of higher education during the twenty-year period. It decided that the present student enrolment of 31,000 should be increased gradually to 274,000 in 1980. The present staff student ratio of 7 should be increased to 15 for universities and 20 for non-university institutions. The present 50 per cent proportion of students studying abroad should gradually be reduced to 10 per cent, and such opportunities should be limited to post-graduate students only. This confirmed the Addis Ababa target decisions. However, taking wastage into account, the enrolment for higher education in 1980 will be 1.5 per cent of the age group rather than 2 and, during the current five-year period, the rate of enrolment will be about three times that foreseen at Addis Ababa.

It was estimated that there would be a need for 14,000 African and 7,000 expatriate staff during the twenty-year period. Secondly, the cost of higher education would increase from \$100 million in 1965 to over \$500 million in 1980. The financing of this development is well within the framework of the Addis Ababa scheme. Recommendations were made for economizing on the costs of higher education, the most important of which was an agreement to limit the number of universities in Central Africa to the 32 existing institutions. In this connexion, it was also agreed to concentrate medical education in 12 institutions and veterinary education in 8. Further, the very low rate of enrolment in agricultural education (3 per cent of the total) was noted and urgent action was decided on to increase this by over 30 per cent.

The design for the development of education in Africa is now nearing completion. There remain two particular sectors to which further detailed attention should be given, adult education and illiteracy, on which a conference organized by UNESCO jointly with ECA is planned in 1963, and scientific research with particular reference to African natural resources, on which a similar conference will be held in 1964.

Through its regular and technical assistance programmes, UNESCO is making available its assistance, along with FAO, ILO and ECA, in the planning of education in 26 African countries. The work of one mission is given as an example.

Even before the independence of the trust territory of Ruanda Urundi, the administering authorities requested assistance from UNESCO, under EPTA, in studying the main aspects of teaching and educational organization. After consultation between the authorities concerned and the Secretariat of UNESCO, it was decided to send an educational planning group under the Expanded Programme of Technical Assistance.

The group, which shared its activities between Rwanda and Burundi, consisted of an expert in comparative education, as group leader, and specialists in primary education, technical education, vocational guidance, economics and statistics, and of three consultants in adult education, women's education and agricultural education, the latter being provided by FAO. Certain of these posts will be continued into 1963-1964 under EPTA for Rwanda and Burundi, and it is expected that the group will reconvene later for a short-term mission.

At the end of its first assignment, the group will submit to both governments a report assessing the educational situation, offering advice on the establishment of educational planning machinery, identifying problems to be studied for the purpose of educational planning, giving preliminary estimates of school enrolment and projections, and making tentative suggestions and recommendations.

Four regional centres have been initiated in Africa in 1962: the Regional Education Centre, the Regional Centre for training teachers for primary teacher training institutions, at Makerere College, Kampala, Uganda, both under the Regular Programme; the Textbook Production Centre in Yaoundé, Cameroun, and the UNESCO School Construction Bureau for Africa in Khartoum, Sudan, both under the Emergency Programme for Africa. Two of these centres are described below in some details.

As part of a scheme to raise the quality of teaching concomitant with the increasing educational facilities in Africa, a programme of training centres

was set up to train tutors for primary teacher training colleges, to conduct research in teacher training and, at a later stage, to train primary school supervisors.

Of the two regional Centres planned, the English-speaking Centre is located at Makerere College, Kampala, Uganda. The first course was successfully completed on 30 September 1962. Seven countries, the Federation of Rhodesia and Nyasaland, Kenya, Nigeria, Somalia, Sudan, Tanganyika and Uganda, contributed 29 students for the first course. UNESCO has provided the services of three experts to supplement the staff of Makerere College. In addition, it has supplied equipment, including library documentation.

A second course started at Bangui in November 1962. UNESCO will continue to supply the services of three experts and will provide further equipment necessary for the course.

The regional School Construction Bureau was planned to meet the tremendous need throughout Tropical Africa for low-cost but functional residential secondary schools and teacher training college buildings. The Bureau began operations in Khartoum at the invitation of the Government of the Sudan in November 1961. The staff comprises the Director, an Architectural Designer, a Structural Engineer, a Physical Engineer, a Site Engineer, a Quantity Surveyor and an Educational Adviser who acts as Programming Officer of the Bureau's operations and local staff. The Bureau will prepare drawings, specifications and quantitative lists and initiate and supervise the constructions for which they accept responsibility; the data and experience thus gained, which will be organized with this purpose in mind, will be carefully analysed and documented. The results will then be circulated to all African states seeking assistance with school building programmes.

The building of the Higher Teacher Training Institute at Omdurman (Sudan) with its annexes, was designed and planned by the Bureau, and being built under its supervision. It is expected that the building for housing the classrooms and laboratories will be ready by January 1963. Work is progressing on the design of the buildings of the Higher Teacher Training School in Zaria (Northern Nigeria) and the Teacher Training college for primary school teachers in Bangui (Central African Republic). Arrangements are in hand for the publication of studies on

the planning, design and construction of these institutions. A preliminary survey of school buildings in the Sudan has been completed.

UNESCO's general policy in the school building field has been insistence upon the functional rather than the prestige value of school buildings, on economical construction and in treating the design of educational buildings, not solely as a matter for an architect, but as a group function for architects, teachers and administrators. Thus the planning of a school building is conceived as a group activity.

In Nigeria, UNESCO has been called upon for the first time to advise a member state on the creation of a University. The Federal Government of Nigeria and UNESCO have set up a joint advisory commission for the establishment of the University of Lagos, which is to assist the Federal Government in defining its status, scope and nature and its relations with other institutions of higher education in the country, to prepare detailed recommendations with regard to the organization, administration and financing of the university, and to formulate a plan of development, with detailed estimates.

The report of the Advisory Commission was transmitted to the Federal Government of Nigeria on 1 December 1961 and was approved. Legislation has been enacted, the first vice-chancellor has been appointed, and the new university will open its doors by the beginning of the academic year 1962-63.

Since the beginning of 1962, two experts have been assigned to the Ivory Coast in the field of technical education. One of them is assisting in the planning of technical education and vocational training in general for the whole country. To the other has been assigned the very important programme of training for young artisans wishing to establish themselves in rural areas as independent workers.

The first expert, attached to the Ministry of Education, has undertaken a complete and very detailed survey of the Ministry's schools. He is now proceeding with a similar study of training institutions not belonging to the Ministry. The results of these two surveys will be compared with the country's needs for skilled labour. In cooperation with the Government authorities, the experts will then reconsider the efficiency of the actual vocational training and technical education curricula.

Because of the importance attached to rural needs, a model technical centre has been established in Gagnoa to train skilled workers in certain specialities. This problem of rural needs is being met in various ways, first, the village chiefs are consulted and play a good part in the re-organization and orientation of the centre, and further, after graduation, the young workers receive considerable assistance from the local authorities, who are anxious to settle artisans in rural areas. The technical centre of Gagnoa has become a model centre and, taking into account the experience acquired there, the Government is considering the establishment of five or six other technical centres, geographically distributed in the country.

UNESCO has also undertaken a survey of the training of middle-grade personnel in Africa, in the public service as well as the private sector, the purpose of which is to analyse the requirements of African countries in middle-grade personnel, to describe the existing facilities for the training of this personnel, and to make suggestions for improving the situation, in particular through the development of existing training institutions and the creation of new ones.

As a first stage in the implementation of this project, national surveys were carried out in six African countries, i.e. Federation of Rhodesia and Nyasaland, Ghana, Madagascar, Mali, Nigeria and Senegal. As a second stage, two general surveys are being carried out, one of which will concern personnel whose training is essentially in the administrative and legal fields, while the second will concern personnel whose training is essentially in the economic, financial and statistical fields. The ultimate purpose of the survey is to make proposals for positive action which could be undertaken with international assistance.

To follow up on the recommendations of the Addis Ababa Conference regarding secondary education and curriculum reform, a regional Meeting of Experts on the adaptation of the general secondary school curriculum was held at Tananarive, Madagascar, in July 1962. Forty-five experts from 29 countries participated in the work of the Meeting together with representatives of the United Nations and 3 of its Specialized Agencies, and 8 observers including 2 from non-governmental organizations.

One Commission of the Meeting examined the methods of curriculum reform and the effects such reform should have on the training of teachers and teaching methods and techniques, and a second Commission studied the present position of the secondary school curriculum. The work of the Commissions was reinforced by two working parties, one of which produced a definition on the aims and objects of general secondary education and the second recommended practical steps for promoting curriculum reform.

In the recommendations of the Meeting will be found not only guides to curriculum reform of a general character but also specific suggestions on the approach to the revision of syllabuses in certain areas of study like the natural and social sciences. The Meeting recognized, however, that there was need for a long-term programme of research and action in curriculum reform, and for machinery which would make that possible. To meet this need, it recommended that an African Committee of Experts be set up under the auspices of UNESCO and interested Member States with the responsibility for initiating and promoting such a programme.

A regional training course for underground water prospection was held in Tunis and attended by 22 participants from 10 countries (Ethiopia, Iran, Jordan, Kuwait, Lebanon, Libya, Sudan, Tunisia, Turkey and U.A.R.). Several countries had offered to act as hosts, but Tunisia was selected partly because of the successful experience in holding a soil salinity training course there in 1959.

The course was directed by three foreign lecturers and consisted of two weeks of theoretical class work and two weeks of practical and field work, including visits to hydrological installations. The Tunisian authorities helped with the administrative arrangements and provided a number of facilities free of charge. Although most of the participants needed more theoretical background, it was felt that this could not be presented in a matter of weeks. On the other hand, training in the field and practical work could yield more immediately useful results. It was therefore recommended that more emphasis be placed on practical work in similar training courses in the future.

A regional training course in marine sciences, held in Casablanca in late 1961, was the first activity in its field which was organized by UNESCO in this region. There were 16 participants from nine countries (Egypt, Kuwait, Lebanon, Libya, Morocco, Syria, Sudan, Tunisia, Turkey). Through the invitation of the Moroccan Government at the General Conference in 1960, the course was held at the Institut National des Pêches Maritimes in Casablanca. The Moroccan Government and the Director of the Institute put all its facilities, including two boats, at the disposal of the trainees.

Two foreign experts directed the course, which included work in both oceanography and marine biology.

The main purposes of this training were to interest the participants in the marine sciences, to encourage them in their individual work in their home countries, to give them all necessary references, to show them the practical use of equipment and laboratories, and to help them stimulate the growth of marine sciences at home. Therefore the content of the course was kept flexible and adapted to the interests and abilities of the participants. The training consisted of lectures, practical demonstrations at sea and in laboratories, the projection of films and excursions to the beach and sea, as well as to a sardine cannery in Safi.

It is hoped to follow up this course with some fellowships for advanced training. A further byproduct is new and increased official interest in the Institut National des Pêches Maritimes, which could serve as nucleus for research in marine sciences in the region.

At the beginning of 1962, a UNESCO team was sent to tropical Africa with a view to reporting to the Director-General of UNESCO on the most urgent needs of the member states of that area in the field of scientific research and training facilities, science teaching at university level, and the exploration and conservation of natural resources. During the two-month mission, the team visited Cameroon, Congo (Brazzaville), Congo (Léopoldville), Ethiopia, Ghana, Guinea, Ivory Coast, Kenya, Liberia, Madagascar, Nigeria, Federation of Rhodesia and Nyasaland, Senegal, Tanganyika, Uganda and, at the end of the journey, held discussions with the ECA Secretariat concerning their mission. The information

gathered during the journey is being used for drawing up a long-term programme to aid the scientific progress of the region, particularly in the field of scientific studies of natural resources, establishment of national research councils, and the development of research laboratories and of faculties of science and engineering.

(K) Housing, Physical Planning and Building

Assistance in physical planning, both on a local and on wider scales, and in low-cost and self-help housing and building has been given during 1962 in a number of countries in Africa. Activities during 1962 in Nigeria include examples of various types of projects in these fields. Thus, UNTA responded to a request from the Federal Government for the services of an architect specializing in low-cost housing, to be attached to the Federal Ministry of Economic Development, which is responsible for the formulation of the Five-Year Federal Capital Development Programmes. In connexion with the Programme for the years 1962-1967, it was necessary to determine, within the context of existing construction practices, those methods and policies which would permit construction of the desired quantity of physical space at substantially reduced costs without reducing the functional utility, physical durability and minimum aesthetic attractiveness of the structures. The focus was to be on Government construction programmes for (in descending order of priority) school classrooms, staff housing, low-cost urban housing, other administrative buildings and urban improvements. The expert was also asked to assess the tendering and financing practices, contractors' overhead costs, land availability and costs, labour productivity, etc. The expert submitted a comprehensive report which further stimulated requests for technical assistance to the country.

Also in response to a request of the Federal Government of Nigeria in this case for assistance in the preparation of a regional development for the metropolitan area of Lagos, the United Nations provided a team of five experts consisting of an urban land policy adviser, a physical planning adviser, a social policy adviser, a transport policy adviser, and a public health and sanitation policy adviser.

In view of the rapid economic, social, physical, and administrative expansion through which the nation's Capital is going, and which will be further stimulated by the five-year plan of economic development, it was felt necessary that the growth of the Federal area and its environs be coordinated within the framework of a comprehensive development policy which includes the improvement of housing conditions, transport, water supply, sewage disposal, and the establishment of suitable administrative machinery to deal comprehensively with the development of metropolitan Lagos.

Other projects in physical planning and housing were carried out in the Western Region of Nigeria during 1962 in order to prepare a master plan for Ibadan, the capital of the Western Region, a city of about half a million population. The Government requested expert advice in organizing and conducting a social survey for the purpose of collecting basic background information. A sociologist was assigned to work on the survey, which includes demographic trends, family organization, levels of living, housing, health, education, employment, etcetera.

In order to meet the increasing need for physical and regional planners, the Government wished to reorganize the existing Twzon Planning School at Ibadan. A United Nations expert was provided to review the curriculum and evaluate the teaching facilities available. He organized short orientation and refresher courses for officials of the Government services operating at the local level and for such groups as community development assistants, village welfare workers, etcetera. The expert was also required to draw up a fellowship programme for training local personnel to fill teaching posts at the school.

A United Nations architect specializing in housing development advised the Western Region Housing Corporation at Ibadan on types of research and compilation of data needed for developing housing communities for middle income groups within the Corporation's housing programme. The expert was asked to pay special attention to site preparation, lay-out, provision of utilities and community facilities and to present his recommendations in a form suitable for use by local authorities, builders, and technicians concerned.

The services of a structural engineer were also made available to the Western Region Housing Corporation to advise on the increased and effective use of local building materials. He was asked to indicate types of applied and operational research needed for materials development and to draw up a programme of work for the purpose.

Other significant activities in housing and physical planning were carried out in Somalia. In order to assist this newly-independent country in facing its housing and planning problems, especially in its capital, the

United Nations appointed, upon the request of the Government, a one-man preliminary survey mission to assess the housing conditions and problems of the country. The expert had to lay special emphasis on the needs, methods, and problems of low-cost housing, including self-help and related techniques, and the available material, financial and human resources. He was asked to make recommendations for the type and extent of technical assistance required for establishing a master plan for Mogadiscio. The expert submitted an extensive report including short-term and long-term proposals and indicating the need for United Nations assistance in urban and rural housing. One of his principal recommendations was the establishment of a self-help housing pilot project in Mogadiscio consisting of 16 houses, built with the participation of five applicants who are workmen in building trades, five civil servants, and five families selected from low-income groups. The first house was to be built by a contractor under the supervision of the United Nations expert as a model house. The United Nations was called upon to finance the cost of materials and some equipment while the Government was to supply land, prepare the site, etcetera. It was proposed to start an additional three projects of fifteen houses each in other parts of Mogadiscio as well as a demonstration project linked with a community development project in a rural area.

In order to implement the recommendations of the survey mission, a housing and planning expert was appointed, and an agreement was reached with the Government for establishing a revolving fund for low-cost housing in which the contribution of the United Nations to this project would be matched by the Government. The housing and planning expert, in cooperation with the United Nations community development expert, started work upon the implementation of the demonstration project described above and work has now begun on the first five houses in the project. At present, the United Nations is recruiting a second expert for the project who will advise specifically on housing finance.

This pilot project in self-help housing has proved of interest to other countries in Africa and it is anticipated that requests for similar assistance will be forthcoming.

Advisory assistance in the field of housing was provided not only through experts assigned to specific countries but also through a regional expert in self-help housing who assisted in developing projects in his field and advised Governments on specific problems at their request.

(L) Community Development

Community development programmes have attracted the attention of national planners in many of the African countries as a means for the use of local initiative in bringing about economic and social development. In some instances, a survey of needs has indicated the importance of fellowships for the training of potential leaders in the establishment and continuance of economic development programmes; in other instances the assignment of advisers has served to promote and strengthen existing programmes.

An example of a balanced and comprehensive project is that carried out with UNTA support in Western Nigeria. Since Nigeria gained independence, the Government of the Western region has reappraised its past practices and reorganized its efforts to improve the living conditions of the rural communities, and segmented approaches in such fields as adult literacy, youth activities and self-help projects were brought together under the Ministry of Economic Planning and Community Development.

With the assignment of a UNTA community development adviser in early 1961, the Government established projects in rural development in various parts of the region. These pilot project areas were selected in consultation with local government councils and were meant to demonstrate the effectiveness of a concerted approach to rural development. An Inter-Ministerial Committee and other coordinating bodies at Division, District and project levels were established.

Initially, four projects were established with the intention of increasing them yearly until the rural development programme covered the whole region. The rate of expansion of the programme, the kind of activities to be given priority, and the amount of funds and other resources the Government is willing to allocate to these activities, are closely related to the Regional Economic and Social Development Plan of Western Nigeria.

Among the more important activities already undertaken within the short time of operation of the programme have been the rehabilitating of

oil mills through the formation of primary cooperatives among the small producers, cooperative organizations for production of tobacco and pottery and an aided self-help housing scheme with the collaboration of a local district council. These are in addition to other generally accepted community development activities such as clean-up campaigns, improvement of village roads, health surveys, literacy classes, etcetera.

The gathering momentum of the programme has made it necessary for the Government to request further assistance, and in June 1962 another community development expert was assigned specifically to assist in the operational aspects of the programme and to give particular attention to youth activities.

Training as a fundamental requisite for a lasting community development programme has also been given close consideration. The Shasha River Camp, which was engaged in leadership training, has been expanded both in facilities and training content. Regular training courses are being conducted for multi-purpose village workers, and orientation courses are organized for technical personnel involved in the community development programme. Both the advisers from the United Nations are closely involved in the training programme, and arrangements are being made at the request of the Government to provide an associate expert to strengthen the faculty of the training centre. UNICEF has also viewed favourably the Government's request for assistance to the training centre in the form of teaching aids, books, equipment and transport.

In addition to the expert services provided to individual Governments as part of the country programmes, advisory services were made available through a regional adviser in community development attached to ECA.

To assist in promoting literacy, a regional workshop was organized by UNESCO during July-August 1962 in Kenya and Uganda to provide advanced training in the techniques of writing, illustrating, translating, testing and publishing of reading materials for newly-literate adults. The first part of the Workshop took place in Nairobi, Kenya, lasted five days and consisted of an exchange of views on the subject matter of the workshop. Among the points treated were: special problems of writing for new literates; illustration; techniques of topic study and testing; preparation of manuscripts and proofreading; the structure of a book; principles and main features of printing processes; the business of publishing and bookselling.

After this theoretical session, the workshop moved to Uganda, where ten days were spent in practical field work. With the help of local specialists, subjects related to the life of the population were chosen. Seven manuscripts were written by four working groups in English and French, were illustrated, and translated into the local language and tested among the new literates in the area. The texts and illustrations were then improved according to the results of the tests. This practical exercise brought home to those who took part in it the importance of an intimate relationship between the producers and consumers of reading materials for new literates and of certain simple techniques of testing their effectiveness before publication.

Thirty-two participants from thirteen African countries and three observers from non-governmental organizations attended the workshop. The participants were selected from some fifty candidates, on the basis of their experience and possible future employment as publishers, editors, writers and illustrators of reading material. They were able to exchange ideas with a UNESCO staff of five specialists and with staff of the East African Literature Bureau and of Government Services in Kenya and Uganda.

A fifty-eight page working paper prepared for this Workshop, entitled, "How to produce reading materials for new literates", was also discussed and revised and will form the basis of a publication shortly to be produced in the series "Manuals on Adult and Youth Education".

In 1962 also, a regional workshop on Urbanization in Africa was held in Addis Ababa under the joint sponsorship of ECA, UNDA, ILO, WHO and UNESCO.

In rural education, the Government of the Malagasy Republic is engaged in adapting the conventional type of school to the requirements of a developing economy, and to achieve mass literacy at a minimum cost.

With the help of an expert provided by UNESCO under EPTA, the implementation of the plan of rural education began in October 1961, on an experimental basis. Three pilot areas were selected for testing and adjusting the methods and techniques to be used, and actual experimentation has so far been conducted in two areas, Antsirabe and Fénérive, which differ substantially in the rate of school enrolment and level of development.

The rural schools devised under this scheme form the first four-year cycle of the primary education system and are to be supplemented by a second cycle of two or three years, corresponding to the "cours moyens". Curricula as well as the distribution of teaching hours are adapted to rural conditions.

Agricultural extension and community development activities, including women's activities, are linked with the assignment of rural teachers who are trained at regional training centres and at a national centre. The UNESCO expert played an important part in launching this project by providing advice and assuming planning and training responsibilities.

(M) Other Social Services

The Economic Commission for Africa has before it the report of the Expert Group Meeting on the Organization and Administration of Social Welfare Services which was jointly organized by the Commission and the United Nations Department of Economic and Social Affairs, with the co-operation of the Government of the Ivory Coast, and held in Abidjan from 16 to 28 April 1962.

This meeting, which was attended by social welfare administrators from Congo (Brazzaville), Dahomey, Ethiopia, Ghana, Ivory Coast, Morocco, Senegal, Sudan, Tanganyika, Togo, Tunisia, Uganda, the United Arab Republic and Upper Volta, represented one of the most important developments in the social field for the region during 1962. The recommendations of the expert group will, when implemented, assist materially in achieving improved national social welfare services programmes in Africa.

During 1962, the UN has continued to carry out a variety of projects in social welfare in African countries. In Cameroun, in addition to experts in community development and housing, the UN provided an adviser on the organization of social services and another on juvenile delinquency problems. In Dahomey, an expert assisted in the evaluation of a programme for the prevention of juvenile delinquency and the treatment of offenders. In Uganda, an expert is advising on family and child welfare programmes. A general social welfare adviser is assisting the Government of Togo. Another general social welfare adviser completed an assignment in Ghana early in 1962 and was assigned to ECA as regional social welfare adviser. Regional advisory services in social policy are also available through an expert attached to ECA. The advisory projects in social services as well as in other social welfare fields, are supported or supplemented in many cases by the granting of fellowships in the same or related fields.

A regional Meeting of Experts on Development of Information Media in Africa was organized by UNESCO and held in Paris from 24 January to 6 February 1962. It was attended by some 120 experts in mass communication from a large number of states and territories, including almost all the African countries. Some twenty international organizations also took part.

The meeting unanimously adopted a report stressing the role of mass media as "a means of information and education for the people". The report included a detailed programme for the development of press, film, radio and television in Africa. The cost of reaching a first-stage, minimum level of ten copies of daily newspapers, five radio receivers and two cinema seats per 100 people in the region was estimated during the meeting at \$360 million. This figure did not include the training of personnel required, nor did it provide for recurring expenditure.

It was suggested that perhaps two-thirds of the capital required would be investments within the national economies of African countries. The balance of

nearly one-third would come from external sources. It was felt that bilateral cooperation programmes might, in particular, provide resources for capital expenditure, while aid from the international organizations might best be employed in preparing the initial plans of a country's information programme, and in assisting the establishment of facilities for the training of personnel.

The meeting suggested that many of its recommendations could be most effectively carried out by governments through the medium of the Economic Commission for Africa. The report singled out a number of specific subjects on which ECA might consider taking action, including transport facilities for the distribution of information materials, low-cost radio receivers, printing paper and press telecommunications.

A UNESCO expert in Mass Communications has been in Togo for the past two years, and has carried out the following projects: (a) The framing of a bill for, and the establishment of, a Togolese national publishing organization; the setting up of a printing works and the planning and publication of a daily newspaper; (b) Organization of training courses for journalists; (c) Reorganization of the government information service and establishment of regional information centres. The daily publication of "Togo Presse" commenced on 1st August 1962, and a circulation of 8,000 copies has already been achieved.

A meeting on the development of educational broadcasting in tropical Africa was organized by UNESCO from 11 to 16 September in Tanganyika, and brought together for the first time broadcasters and educators from the English and French speaking parts of Africa. It was attended by forty participants from twenty-nine countries and territories. The meeting underlined the urgency of expanding African radio services, stressed their rôle in education and information and urged the development of the closest cooperation between educational authorities and broadcasting services. Its recommendations concern regional cooperation in the field of broadcasting, the training of staff, and the organization of pilot projects in educational radio and television.

The International Centre for Higher Studies in Journalism, established at the University of Strasbourg with the aid of UNESCO, conducted a regional training course for African journalists from 2 May to 13 July 1962. This session, at which 8 UNESCO fellows were present, was designed to give general and

professional instructions to information personnel from government departments and the private press and to study the rôle of mass communications in economic and social development.

A UNESCO mission to promote the production and utilization of audio-visual aids began work in the Senegal in August 1961. Although there had already been interesting activities in this field in the past, independence permitted a new departure. The major problem faced by emerging countries in this field is to find solutions which take into account the dearth of financial resources and qualified personnel. The best solution found so far is the creation of a national audio-visual centre, capable of meeting the audio-visual needs of all ministries and services. Although experience has shown that, in general, this kind of co-operation is difficult to realize, in Senegal, on the contrary, the effort has met with full success. A "Centre de Recherches et de Production pour l'Information et l'Education des Masses" was established by presidential decree on 21 June 1962. The Centre, for which very adequate funds and personnel are planned, will deal with the whole range of audio-visual media, from the cinema and low-cost visual aids to radio broadcasting and journalism.

To coordinate the activities of the Centre, an inter-ministerial programme committee has been set up composed of representatives of the Ministries of National Education, Technical Education, Health and Social Affairs, Information, Youth and Sports, as well as representatives of the Commissariat général au Plan and the national broadcasting system.

This remarkable result was achieved through close and fruitful collaboration between the UNESCO mission and the French bi-lateral aid mission, which will offer substantial assistance to the Centre during the first few years of its activity.

Participants from twenty-eight African countries and observers from a number of organizations interested in library development in Africa attended the second Regional Seminar on the Development of Public Libraries in Africa, held at Enugu, Nigeria, which was organized by UNESCO to follow up on the first seminar held at Ibadan, Nigeria, in 1953. Its purpose was to consider the action which should be taken in each country for the development of public libraries both in support of national educational activities planned at the

1961 Addis Ababa Conference on the Development of Education in Africa, and as educational and cultural centres in their own right.

The Regional Central Library at Enugu, a joint pilot project of UNESCO and the Government of Nigeria, served the participants as a demonstration of good public library service in action.

The meeting recommended that Governments should be asked to include the development of public libraries as an integral part of their general educational development plans and that provision should be made for competent representation of library interests in the organization of national and international conferences on educational planning. The meeting also recommended that legislation establishing a public library service on a national level should be enacted in all African countries and that the Governments be requested to take steps necessary for the planning of a nation-wide public library service by 1965. Recommendation was also made that the expenditure for public library services to be established in African countries in 1963 should be at least US \$4,300 per 0.5 million inhabitants and that by 1970 the annual expenditure on public library services should amount to about one per cent of the annual expenditure of the country on formal education, and by 1980 to about two per cent of such expenditure. On the basis of this formula, total expenditure needed for thirty-three countries of Africa during the period 1963-70 was estimated at US \$82,781,750.

A museum expert was sent by UNESCO on a short-term mission to Liberia in 1959 to examine the facilities proposed for a national museum and to prepare recommendations for its establishment. In addition, some equipment was furnished for scientific documentation necessary for the accumulation of collections. A former presidential palace, which was being used as the Immigration Office on an interim basis, was considered to offer possibilities for conversion into a national museum. It is intended to exhibit materials of the traditional cultures of the peoples in the interior as well as of the historical objects resulting from the settling of the coast during the nineteenth century by former slaves from North America.

At the request of the Government a director was furnished for a period of eighteen months under the UNESCO OPEX plan who began his work in January 1962. The recruitment and training of staff, and preparation of exhibitions are taking place, as well as the accumulation of collections. Educational programmes, worked out in cooperation with the local schools, and programmes for adults are being planned for the future.

(N) Atomic Energy

The International Atomic Energy Agency made a contribution to the implementation of national development plans in several countries of Africa in 1962. In particular, assistance in the development of atomic energy programmes was given by a preliminary mission which visited Cameroun, Congo (Léopoldville), Ethiopia, Gabon, Kenya, Madagascar, Tanganyika, Togo and Uganda and by individual experts in Senegal and Tunisia.

Industrial development is being assisted in Tunisia by an expert in utilizing radioisotopes to test soil for building foundations and road construction; work is also proceeding on the testing, by similar methods, of structural materials including concrete.

In Agriculture there was emphasis on the role of radioisotopes in increasing agricultural production. In Ghana, for example, an expert was assigned to assist in a research programme concerned with problems of soil fertility, mineral nutrition of plants and cocoa disease control and, in Uganda, expert advice was given on plant nutritional studies for the purpose of increasing yields of cotton and maize.

In view of the importance of ground water potential, isotope techniques are now being applied on an increasing scale to determine characteristics of ground water reservoirs. In this connexion, advice was given in Kenya on the tracing of underground water by the use of tritium.

The application of radioisotopes in medicine is also increasing in Africa. IAEA expert assignments concerned with health physics and radiation protection were carried out in Ghana and Tunisia. In Mali, an expert assisted in the development of a programme to study the distribution and metabolism of drugs, and also helped in the treatment of leprosy, both tests involving the use of radioisotopes. In Senegal, advisory assistance and equipment was provided to the Anti-cancer Institute being constructed in Dakar.

TABLE I

Cost of Field Programme in Africa : 1960 - 1961/62

Country	1960 (Delivered)			1961 (Delivered)			1961-62		
	EPTA	Regular	Total	EPTA	Regular	Total	Approved EPTA	Estimated Regular	Total
Algeria	3,025		3,025	3,642		3,642	46,600	43,550	95,150
Basutoland		24,652	24,652	14,118	850	14,968	94,800		94,800
Bechuanaland		910	910	20,678		20,678	37,448	9,000	46,448
British East Africa	64,787		64,787	33,169		33,169	40,400		40,400
Burundi 2/								47,741	47,741
Cameroon	79,550	32,001	111,551	222,592	100,909	323,501	913,280	429,351	1,342,631
Central African Republic	4,000		4,000				421,366	10,298	431,664
Chad	9,750		9,750	104,183	12,662	116,845	406,350	42,509	448,859
Comoro Islands				68,840	4,000	72,840	50,660	6,500	57,160
Congo (Brazzaville)	4,205		4,205	59,604	11,392	70,996	307,200	43,272	350,472
Congo (Leopoldville)	1,220	98,474	99,694		112,119	112,119		341,918	341,918
Dahomey	3,136		3,136	121,898	23,881	145,779	430,300	196,584	626,884
Ethiopia	500,847	175,170	676,017	429,899	242,028	671,927	1,004,832	502,620	1,507,452
Fr. Terr. in Africa		15,649	15,649						
French Somaliland									
Gabon	10,485		10,485	46,159	28,409	74,568	50,400	163,440	50,400
Gambia	218		218	28		28	367,677	2,800	531,117
Ghana	293,822	231,484	525,306	339,519	237,426	576,945	132,220	628,924	135,020
Guinea	103,885	32,535	136,420	99,887	9,823	109,710	806,866	80,523	1,435,790
Ivory Coast	4,470	1,400	5,870	117,721	6,546	124,267	745,075	100,535	825,598
Kenya	73,886	16,282	90,168	95,097	39,574	134,671	598,500	181,022	699,036
Liberia	206,741	213,606	420,347	204,874	155,229	360,103	314,653	339,568	495,675
Libya	628,897	153,029	781,926	555,301	112,919	668,220	497,060	245,755	836,628
Madagascar	10,946	15,803	26,749	132,450	27,149	159,599	1,256,602	193,617	1,502,357
Mali	30,500	8,828	39,328	84,099	30,787	114,886	742,902	184,416	936,519
Mauritania				33,457	7,430	40,887	512,560	45,175	696,976
Mauritius	8,187	39,159	47,346	49,322	51,916	101,238	337,300	107,076	382,475
							123,089		230,165

TABLE I

Country	1960 (Delivered)			1961 (Delivered)			1961-62		
	EPTA	Regular	Total	EPTA	Regular	Total	Approved EPTA	Estimated Regular	Total
Morocco	328,548	91,369	419,917	381,567	61,542	443,109	865,701	348,291	1,213,992
Niger	142,556	74,176	216,732	99,933	44,766	144,699	528,800	209,266	738,066
Nigeria				426,149	124,162	550,311	1,671,974	493,889	2,165,863
Port. Terr. in Africa		46,045	46,045		79,614	79,614	31,200	225,603	256,803
Rhodesia and Nyasaland, Fed. of	20,100	95,056	115,156	78,279	87,239	165,518	225,017	193,414	418,431
Rwanda Urundi ^{1/}	34,995	6,891	41,886	23,733	4,663	28,396	679,000	4,663	683,663
Rwanda ^{2/}							625,631	51,521	51,521
Senegal	4,502	11,401	4,502	129,797	16,444	146,241		60,408	686,089
Seychelles	13,575	8,860	24,976		6,250	6,250	449,774	6,250	6,250
Sierra Leone	23,614	127,387	32,474	109,392	41,206	150,598		100,682	550,456
Somalia	171,336	36,661	298,723	336,397	378,320	714,717	1,141,043	826,353	1,967,396
South Africa					16,871	16,871		39,171	39,171
Sudan	473,836	180,425	654,261	497,891	240,494	738,385	1,107,280	484,547	1,591,827
Swaziland		24	24				38,573		38,500
Tanganyika	107,415	6,630	114,045	162,113	7,669	169,782	918,000	126,958	1,074,958
Togo	82,367	26,830	109,197	270,468	96,479	366,947	669,779	316,636	986,415
Tunisia	285,542	159,811	445,353	285,232	105,532	390,764	825,045	219,699	1,044,744
Uganda	13,133	86,964	100,097	26,024	100,963	126,987	201,552	218,448	420,000
United Arab Rep.	711,820	130,402	842,222	633,226	153,744	796,970	1,673,803	431,967	2,105,770
Upper Volta		1,551	1,551	56,213	4,710	60,923	586,350	48,863	635,213
Zanzibar	67,801	27,717	95,518	88,641	19,045	107,686	144,500	44,402	188,902
Regional	465,706	836,449	1,302,155	490,368	1,332,580	1,822,948	1,264,080	4,524,627	5,789,307
TOTAL	4,989,103	2,013,631	8,003,034	6,931,960	4,147,342	11,079,302	23,915,819	12,926,853	36,842,672

^{1/} See also Burundi and Rwanda. EPTA assistance approved for 1961-62 in respect of Rwanda-Urundi became available for the Kingdom of Burundi and Republic of Rwanda after 1 July 1962.

^{2/} See also Rwanda-Urundi

TABLE II
Experts' Assignments in Africa, 1960-1961/62

Country	1960(Delivered)			1961(Delivered)			1961-62		
	EPTA	Regular	Total	EPTA	Regular	Total	Approved EPTA	Estimated Regular	Total
Algeria	1		1	1		1	2		2
Basutoland		2	2	1		1	9		9
Bechuanaland				4	1	5	8	3	11
British East Africa	4		4	4		4	4		4
Burundi 2/									
Cameroon	5	3	8	11	11	22	63	2	2
Central African Republic								34	97
Chad				8	1	9	21	1	22
Comoro Islands				2		2	17	3	20
Congo(Brazzaville)		5	5	4		4	6		6
Congo(Leopoldville)		44	44		6	6	18		18
Dahomey		17	54	7	2	9	29	16	30
Ethiopia	37			33	22	55	70	38	108
French Somaliland									
Gabon				2	4	6	3	14	28
Gambia	1		1						
Ghana	24	13	37	31	22	53	15	1	16
Guinea	12	4	16	11	3	14	60	45	105
Ivory Coast				11		11	46	7	53
Kenya	8	5	13	9	3	12	38	5	43
Liberia	17	14	31	17	13	30	27	20	47
Libya	59	18	77	54	13	67	33	30	63
Madagascar				7	11	18	103	24	127
Mali		1	1	7	3	10	39	21	60
Mauritania				1	3	4	36	16	52
Mauritius		3	5	5	2	7	14	6	20
Morocco	2	7	54	42	3	48	12	9	20
Niger	47			5	6	11	80	25	105
				5	3	8	35	16	51

TABLE II

Country	1960(Delivered)			1961(Delivered)			1961-62		
	EPTA	Regular	Total	EPTA	Regular	Total	Approved EPTA	Estimated Regular	Total
Nigeria	12	13	25	39	14	53	130	38	168
Port. Terr. in Africa							2	15	17
Rhodesia and Nyasaland,	1	5	5	6	8	12	26	13	39
Fed. of 1/		6	7		6	12		8	49
Rwanda Urundi- 2/	4		4	5		5	41	4	4
Senegal				10	1	11	45	6	51
Seychelles	1	1	2				32	12	44
Sierra Leone	3	1	4	12	4	16	36	56	92
Somalia	19	10	29	27	23	50			
South Africa									
Sudan	46	24	70	36	22	58	81	40	121
Swaziland							4		4
Tanganyika	8	1	9	22	1	23	75	14	89
Togo	11	1	12	16	9	25	53	28	81
Tunisia	30	15	45	31	12	43	72	18	90
Uganda	1	3	4	2	6	8	17	15	32
United Arab Rep.	63	14	77	68	15	83	161	23	189
Upper Volta		1	1	6	2	8	39	9	48
Zanzibar	5	2	7	5	2	7	12	3	15
Regional	38	25	63	33	88	121	144	155	299
TOTAL	459	258	717	595	342	937	1,772	827	2,599

1/ See also Burundi and Rwanda

2/ See also Rwanda Urundi

Fellowships awarded to countries and territories of Africa, 1960-1961/62

[illegible]

TABLE III

Country	1960 (Delivered)			1961 (Delivered)			1961-62		
	EFTA	Regular	Total	EFTA	Regular	Total	Approved EFTA	Estimated Regular	Total
Mauritius		8	8		3	3	1	8	9
Morocco	9	20	29	13	27	40	7	50	57
Niger	2	3	5	19	6	25	40	7	47
Nigeria	12	12	24	36	37	73	39	76	115
Port. Terr. in Africa	2	15	17	2	5	7	9	14	23
Rhodesia and Nyasaland, Fed. of									
Rwanda Urundi 1/	8	7	15	8	4	12	10	14	24
Rwanda 2/		3	3	1	3	4	30	6	36
Senegal	3	2	5	16	13	29	24	19	43
Seychelles		1	1		1	1		1	1
Sierra Leone	2	6	8	8	9	17	23	10	33
Somalia	18	20	38	26	28	54	20	43	63
South Africa		19	19	3	13	16		22	22
Sudan	24	42	66	46	66	112	42	99	141
Swaziland									
Tanganyika	2	12	14	6	8	14	24	14	38
Togo	7	6	13	22	19	41	18	25	43
Tunisia	24	28	52	32	27	59	16	46	62
Uganda	7	12	19		5	5	6	8	14
United Arab Rep.	73	45	118	46	126	172	70	157	227
Upper Volta	2	3	5	7	2	9	44	5	49
Zanzibar				1	1	2	9	3	12
Regional							703	202	905
TOTAL	314	564	878	607	800	1,407	1,696	1,440	3,136

1/ See also Burundi and Rwanda
2/ See also Rwanda-Urundi

TABLE IV

Major Fields of Assistance of the Expanded
Programme in Countries of the ECA Region

		<u>1 9 6 1</u>	
		(in thousands of US dollars)	Per Cent
I.	Basic surveys of resources and building up of administrative services	1,123	16.20
II.	Power, transport and communications	465	6.71
III.	Industrial production and mining	202	2.91
IV.	Agricultural production	1,258	18.15
V.	Auxiliary services to industry and agriculture	632	9.12
VI.	Health services	1,778	25.65
VII.	Education	747	10.78
VIII.	Community development	503	7.25
IX.	Other social services	217	3.13
X.	Atomic energy	7	.10
TOTAL :		<u>6,932</u>	<u>100.00</u>