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DRAFT PROGRAMME OF WORK AND PRIORITIES FOR 1969-1970 WITH PROJECTIONS TO 1973

#### PRELIMINARY DRAFT

# PROGRAMME OF WORK AND PRIORITIES FOR THE BIENNIUM 1969-1970 WITH PROJECTIONS TO 1973

Note by the Executive Secretary

Following decisions and recommendations of the Committee on Programme and Co-ordination and the Ad hoc Committee of Experts to Examine the Finances of the United Nations and the specialized agencies, this Programme of Work and Priorities covers the biennium 1969-1970 with projections to 1973. The ninth session will be asked to endorse a recommendation that, in future, for each biennium a Programme of Work and Priorities will be prepared covering a period of six years, the proposals for the first two years being precise and definitive, the proposals for the second two years being less precise and firm and the proposals for the fifth and sixth years being in the nature of projections. This is necessary to fit in with the proposed United Nations Headquarters budgeting, programming and reporting procedures.

Before the preparation of this Programme of Work and Priorities was begun, a reappraisal was undertaken of the tasks of the Economic Commission, as defined in its terms of reference and its resolutions. It became clear that the Commission would be of maximum assistance to member States in precising their aims and goals and preparing and implementing plans, programmes and projects for economic and social development, taking into account national efforts as well as external assistance. Obviously responsibility for development rests with the governments of African countries but assistance offered by outside agencies — whether multinational, bilateral or private — should be used in the most effective way to achive goals set by the countries themselves.

In this context, the role of the ECA is seen to be to:

- Elucidate the development needs of African countries, individually and collectively;
- Make inventories of resources to meet these needs (bearing in mind that the vast majority of resources must be found within the countries themselves);
- Match needs to resources and try to arrange for additional resources to be made available as necessary;
- Follow up action taken to meet the needs identified.

The Programme therefore consists of priority projects which in conjunction with assistance given by other members of the United Nations family of organizations, bilateral donors and other institutions will assist governments:

- To improve their planning machinery at all levels;
  - In the analysis of plans and plan implementation in particular in determining measures to be taken to remove obstacles to plan implementation;
- To define their objectives precisely and to elaborate viable plans, programmes and projects:
  - In exploring sources of assistance for identified projects; and
- By giving training and preparing documentation which will be of immediate practical assistance to member States, at national, sub-regional or regional levels, as well as drawing attention of governments and other members of the United Nations family of organizations to training needs.

In all these processes collective action by countries will be encouraged whenever it would appear to be advantageous - in groupings of two or more countries, at the sub-regional level or at the regional level.

The guiding principle followed in preparing the Programme has been the modernization of Africa, which springs from the wishes of member States as expressed in the various resolutions passed at the Commission's sessions. As this includes every field of action which affects the development of the African continent, there is a risk that its translation into practical terms might dissipate the activities of the Commission. Emphasis has therefore been given, during this quinquennium, to two objectives in particular: industrialization and modernization of agriculture. The choice of these two objectives does not in any way imply that other activities of the Commission will be neglected.

Each of the substantive Divisions and Sections of the secretariat, acting within the framework of the policies laid down by the General Assembly, the Economic and Social Council and sessions of the Commission, has made proposals for:

- Concerted action for economic development and the improvement of conditions for effective utilization of natural and human resources;
- Studies, professional papers, special reports on economic and social problems and surveys, where necessary with economic and technical assistance from multilateral and bilateral agencies, foundations, etc.;
- The collection, evaluation and dissemination of economic, technical and statistical data and information;
- Advisory services and advisory missions to member countries, the co-ordination of such advisory services with those rendered by other members of the United Nations family of organizations and by bilateral donors and foundations, etc.;
- Co-operation with United Nations Headquarters. OTC, specialized agencies, governments providing assistance to African countries, inter-governmental organizations and other bodies in the

implementation of plans and projects, including briefing
of experts in preparing and implementing national development
plans and preparing country programmes of technical assistance;

- Assistance in the formulation and development of co-ordinated policies designed for the promotion of the various specialities and their application in the African region.

The Programme therefore contains in each sector, in addition to specific projects and sub-projects, a list of continuing tasks which will be undertaken in the carrying out of these responsibilities.

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STAFF RESOURCES

# Direction, policy formulation and administration

# 1. Cabinet office of the Executive Secretary

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a/ In addition, one headquarters post is assigned to ECA.

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#### 3. Sub-regional offices

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4. In addition, the secretariat operates five regional statistical and demographic research and training centres (Cairo, Addis Ababa, Dar-es-Salaam, Yaoundé and Accra). A sixth (in Rabat) is administered by Headquarters and a seventh, similarly administered, will be established in Makerere College, Kampala, in 1969.

# ANNOTATED LIST OF PROJECTS FOR 1969-1970 WITH PROJECTIONS TO 1973

# I. ECONOMIC DEVELOPMENT PLANNING

# A. Economic Development Planning, Projections and Policies Responsibility: RESEARCH AND STATISTICS DIVISION : Economic Research Section

#### STAFF RESOURCES

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Economic Research Section	<u>on</u> 1967	_	2	4	4	1	6
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	1969*	-	2	2	4	2ª/	3
	1970*		2	2	4	3 <sup>a</sup> /	3
	1971*	-	2	3	4	3ª/	3
Regional Advisers	1967	3					
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	1970* 1971*	3					

<sup>\*</sup> Proposed.

<sup>1/</sup> The staff requirements for the direction of the Division are included under "Statistical Services".

a/ Includes one professional trainee.

b/ Three posts transferred with work to "Statistical Services".

#### I. ECONOMIC DEVELOPMENT PLANNING

# A. Economic Development Planning, Projections and Policies

To secure their development targets, most of the African countries have prepared plans into which to fit their economic and social policies and render their efforts at development effective.

Nevertheless, it has been observed that from 1960 to 1966, at least, the average annual growth of CDP in Africa falls below the 5 percent rate fixed for the first United Nations Development Decade, and that a great deal still remains to be done in plan preparation and implementation, if the hopes for progress in economic and social development are to be fulfilled.

The main obstacles to plan implementation are as follows:-

- the targets are not always realistic and consistent;
- project identification is often inadequate or incomplete;
- the political and social structures are unsuitable for the present circumstances;

Consequently the secretariat's work programme aims at:-

- helping to improve plan preparation and the supervision of development plan implementation;
- helping to standardize concepts and methods to facilitate the exchange of experience from one country to another and make it possible to compare results:
- specifying the special circumstances required for planning in Africa;
- sustaining effort in economic co-operation to secure sufficiently large markets, and so promote industrialization and economic and social development.

#### PROJECTS

# 1. Developing Economic Research

This project entails:-

- the examination, in conjunction with the countries concerned, of progress achieved and problems connected with the implementation of programmes for projections, planning and economic surveys;
- the study, in conjunction with the countries concerned, of their requirements in technical assistance and the provision of assistance to such countries, at their request, through regional advisers working in conjunction with the Centre for Development Planning, Projections and Policies and the Bureau of Technical Assistance Operations at UN Headquarters;
- preparing documentation and servicing the sessions of the Conference of African Planners.

The activities which will be undertaken in the quinquennium are as follows:-

- (a) Third Session of the Conference of African
  Planners (1970)
  - (b) Fourth Session of the Conference of African
    Planners (1972)

Other ECA divisions and sections will assist the Research and Statistics Division in planning and running these conferences.

# 2. Establishment of Economic Norms for Africa

This project entails:-

- research on planning techniques and problems, projections and economic research;
- with the co-operation of the United Nations Centre for Development Planning, Projections and Policies and of the specialized agencies, preparing documents on methodology for

general use at seminars and working groups of experts organized for the exchange of ideas on how to improve, regionally and internationally, the results obtained in economic development by individual African countries, and make them easier to compare;

- studying ways and means of adapting international norms to

The following studies and meetings will be undertaken during the quinquennium:-

- (a) Standardizing the Use of Basic Concepts and Methods to be used by African Countries, and Assessing the Needs of Statistics and Technical Data Required for Preparing Projections (1969-1970)
- (b) First Meeting of the Technical Group on Projections and Programming: Commodity Projections for Africa (1969)
- (c) Working Group of Senior Economic Advisers on Economic Policy: Short, Medium and Long-Term (1969)
- (d) Regional Seminar on Plan Harmonization (1969)
- (e) Second Reeting of the Technical Group on Projections and Programming: Data Required for Projections (1970)
- (f) Inter-Agency Meeting on Economically Relatively Less Developed
  Areas in Africa (1970)
- (g) Seminar on Integration of National Plans with Sectoral and Regional Development Plans (1970)
- (h) Working Group on Manual of Planning for African Countries (1970)
- (i) Study on the Approach to Regional Integration of National
  Projections to Obtain a Picture of the African Economy (1971)
- (j) Third Meeting of the Technical Group on Projections and Programming: Aggregative Growth Models for African Economies (1971)

- (k) Working Group of Experts on Regional Harmonization of Development Plans (1971)
- (1) Working Group on Financing of Development and Budget
  Management (1971)
- (m) Fourth Meeting of the Technical Group on Projections and Programming: Sectoral Projections for Africa (1972)
- (n) Seminar on Infrastructure and Economic Development (1972)
- (o) Seminar on Commodity Trade Policy and Economic Growth (1972)
- (p) Fifth Meeting of the Technical Group on Projections and Programming: Integrated Approach for Projections, Planning and Policies (1973)
- (q) Seminar on Employment Policy and Economic Growth (1973)

Assistance will be requested from UNDP, through the regional programme of technical assistance, in running sub-projects (c), (g), (h), (k), (1), (n), (o) and (q) above. The co-operation of Specialized and Operating Agencies will be requested as appropriate. Other ECA divisions and sections will assist the Research and Statistics Division as appropriate in implementing the sub-projects.

#### 3. Economic Surveys

This project entails:-

- the study on national development policies and economic situation in Africa;
- analyzing the economic position, changes and trends throughout the region;
- conducting economic development surveys throughout the sub-region.

In addition to special studies on particular economic problems, undertaken as required, the following will be published annually:-

# (a) Survey of Economic Conditions in Africa

The survey will be in two parts, the first part being a general appraisal of economic conditions, the second part dealing with a different topic each year.

- (i) Survey of Economic Conditions in Africa (1969)
- (ii) Survey of Economic Conditions in Africa (1970)
- (iii) Survey of Economic Conditions in Africa (1971)
- (iv) Survey of Economic Conditions in Africa (1972)
  - (v) Survey of Economic Conditions in Africa (1973)

### (b) Economic Bulletin for Africa

- (i) Economic Bulletin for Africa (1969)
- (ii) Economic Bulletin for Africa (1970)
- (iii) Economic Bulletin for Africa (1971)
- (iv) Economic Bulletin for Africa (1972)
- (v) Economic Bulletin for Africa (1973)

Other ECA divisions and sections will assist the Research and Statistics Division in implementing these sub-projects.

# 4. Collection, Exchange and Distribution of Information

This project entails:-

- the collection and analysis of all information on national policies and targets for economic development;
- the distribution of economic data for all the countries in the region, designed to facilitate the co-ordination of development plans and policies.

In addition to documents on methodology and economic surveys already mentioned under the other headings, the following publications will be

issued during the five-year period:-

- (a) Bibliographies of Economic Material Published by African Countries
  - (i) Bibliography of Economic Material Published by African Countries (1970)
  - (ii) Bibliography of Economic Material Published by
    African Countries (1972)
- (b) Manual on Planning for African Countries (1970)
- (c) <u>Planners' Newsletter</u>
  - (i) Planners' Newsletter (1969)
    - (ii) Planners' Newsletter (1970)
  - (iii) Planners' Newsletter (1971)
  - (iv) Planners' Newsletter (1972)
  - (v) Planners' Newsletter (1973)

#### CONTINUING TASKS

The following continuing tasks will be undertaken during the quinquennium:

- (a) providing advisory services and undertaking advisory missions to Member Countries, on request, in the field of development planning, projections and economic surveys;
- (b) giving assistance to and maintaining liaison with central planning organs, universities and other planning institutions and organizations;
- (c) preparing, as required, revising and re-issuing studies, documents and papers not linked with specific projects and sub-projects;
- (d) co-operating, as necessary, in implementing the programmes of other divisions and sections of ECA and the African programme of Specialized and Operating Agencies of the United Nations, IDEP and similar organizations;
- (e) following up former projects, sub-projects and visits by correspondence, elaboration of reports and recommendations, etc.;

- (f) collecting and processing data required for projections; the preparation and revision of long-term projections for all the countries in the region;
- (g) studying the results of economic projections prepared by national and international organizations for African countries and analyzing the results, regionally and internationally, of the long-term projections of each of the African countries;
- (h) evaluating the possibilities for long-term economic growth and co-operation of the countries in the region, and determining the basic elements for economic co-operation and policy development;
- (i) studying the techniques and methods used in programming, overall and sectoral projections as well as projections on the basis of commodities and recommending the most appropriate techniques and methods for conditions obtaining in Africa;
- (j) co-operating with the Centre for Development Planning,
  Projections and Policies, to improve world economic projection
  models, bearing in mind needs and circumstances of Africa;
- (k) collecting and processing the development plans of the African countries, studying the obstacles to their implementation, and considering measures to be adopted to improve development plan preparation and supervise its implementation;
- (1) determining the special circumstances required for planning in Africa, bearing in mind the pattern of resources and needs in the African countries and the preparation of a minimum pattern to all African plans;
- (m) studying the requirements of ECA Member States for specialized staff for projections, planning and economic surveys, and the training and other services required to meet these needs;
- (n) assisting Governments to organize, at the national and sub-regional levels, courses on projections, planning and economic surveys and in establishing, as required, regional training centres, with the help of the United Nations Development Programme as necessary.

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#### I. ECONOMIC DEVELOPMENT PLANNING

B. Economic Co-operation

Responsibility: TRADE AND ECONOMIC CO-OPERATION DIVISION Economic Co-operation Section

# STAFF RESOURCES

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<sup>\*</sup> Proposed.

<sup>1/</sup> The staff requirements for the direction of the Division are included under "International Trade".

a/ Includes one post transferred from "International Trade".

#### B. Economic Co-operation

The countries in each of the four sub-regions have taken the first steps towards closer economic co-operation at the sub-regional level. But although the initial phase of the task of promoting multinational economic co-operation in Africa is completed and the idea has now been generally accepted, the specific measures of co-operation have yet to be elaborated. With a view to assisting African Governments in this field, the work programme is formulated to facilitate the following main, broad lines of action:

- African countries will now have to set up or strengthen their multinational machinery within which they can discuss and take decisions on their collective policies and projects;
- an essential part of the multinational machinery should be a civil service to advise on and promote their joint undertakings;
- African countries should agree on, and find the material means for, implementing a number of concrete development projects which increase economic contacts between them.

UNDP has indicated its willingness to give assistance in the form of "country programmes" (as in the case of the East African Community); Special Fund "mini-projects" (as in the case of the West African Community and the East African Community) and from contingency funds (as in the case of the Maghreb Community). It would seem therefore, that the time has come when ECA should limit itself to meeting requests from the multinational agencies for studies to be undertaken and for specific expert assistance to be given in connexion with the holding of meetings and the implementation of their programmes.

Apart from provisions to meet such requests, the ECA programme in this field will, therefore, be aimed at enlarging and consolidating existing economic groupings; extending their fields of operation and developing machinery for economic co-operation.

#### PROJECTS

- 5. The Development of Economic Cooperation
  - (a) West African Sub-Regional Meeting on Economic Cooperation (1969)
  - (b) East African Sub-Regional Meeting on Economic Cooperation (1969)
  - (c) North African Sub-Regional Meeting on Economic Cooperation (1969)
  - (d) Central African Sub-Regional Meeting on Economic Cooperation (1970)

Assistance will be requested from UNDP, through the regional programme of technical assistance. UNCTAD, UNIDO, GATT and the appropriate specialized agencies will be invited to cooperate. Other divisions and sections in the ECA will assist the Economic Cooperation Section in the servicing of these meetings.

It is hoped that multinational economic groupings in each of the sub-regions will have been formed and consolidated by 1970 and that their secretariats will take responsibility for arranging future meetings on economic cooperation. It is expected that technical meetings on particular economic and social sectors and problems will also be held in the years following 1969. The ECA secretariat will offer assistance by providing experts, preparing basic documents, etc., and, as appropriate, in obtaining funds, by the setting up of Special Fund Mini-Projects or otherwise, for the holding of such meetings and the furtherance of institutions for economic cooperation.

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# 6. Studies on Economic Cooperation

The following studies will be undertaken during the quinquennium:-

(a) Study of the Prerequisites for Multi-National Economic Cooperation (1969)

The principle of multinational economic cooperation has been established. Criteria must be worked out for deciding which particular specific cooperation measures are appropriate. This, in turn, will determine whether or not the time is ripe to include wider areas of cooperation both geographically and by sectors — in negotiations and agreements.

This study will investigate the prerequisites for multinational economic cooperation in general and in relation to specific projects.

(b) Study of the Forms of Institutional Machinery Suitable for Different Types and Degrees of Economic Cooperation (1970)

The varieties in type and size of the multinational economic groupings which have already been established and the need to find effective machinery to serve each type and size make it appropriate to undertake a study of the forms of institutional machinery suitable for different types and degrees of economic cooperation.

(c) Manual of Criteria for Appraisal of Gains and Losses for an Individual Country in a Multinational Grouping (1970)

The manual will assist government officials in assessing potential net benefits and in negotiating acceptable terms for sub-regional cooperation. An attempt will be made to identify those elements which are really significant as yardsticks for measuring gains and losses.

(d) Study of Possible Sources of External Assistance to
Inter-Governmental Economic Groupings and How They
Can be Tapped (1971-1973)

This study will cover both multilateral and bilateral sources of economic and technical assistance. The procedures to be followed by inter-governmental economic groupings in making and justifying applications for such assistance will be based on the terms of reference and basic legal documents of these groupings.

UNCTAD, UNIDO, GATT and the appropriate specialized agencies will be invited to cooperate. Other divisions and sections of the ECA will collaborate with the Economic Cooperation Section in the preparation of these studies.

These studies, supported by substantive studies from other divisions and sections in the ECA on issues such as trade, industry, agriculture, transport and natural resources, manpower and training, etc., will be submitted to the secretariats of multinational groupings as well as to meetings of groups of countries cooperating within inter-governmental machinery.

#### 7. Seminars on Economic Cooperation

The establishment of the inter-governmental groupings will create a great demand for experts and staff to serve in the new sub-regional communities, other multinational bodies and individual African countries. These requirements can partly be met by running seminars to train officials from multinational groupings or individual governments. The following seminars, which will last for about two weeks each, will be arranged for senior officials from Member States and the secretariats of intergovernmental groupings:-

- (a) Seminar on Economic Cooperation (1969)
- (b) <u>Seminar on Economic Cooperation</u> (1970)

- (c) Seminar on Economic Cooperation (1971)
- (d) Seminar on Economic Cooperation (1972)
- (e) Seminar on Economic Cooperation (1973)

Assistance will be requested from UNDP through the regional programme of technical assistance. UNCTAD, UNIDO, GATT and other appropriate Specialized and Operating Agencies and bilateral donors will be invited to cooperate. Other divisions and sections in the ECA will assist the Economic Cooperation Section in running these seminars.

#### CONTINUING TASKS

The following continuing tasks will be undertaken during the quinquennium:-

- (a) providing advisory services and undertaking advisory missions to Member States and intergovernmental economic groupings, on request, on matters relating to economic cooperation, including providing consultants, on request, to prepare for and attend intergovernmental meetings;
- (b) Preparing, as required, revising and re-issuing studies, documents and papers not linked with specific projects and sub-projects, including brochures, monographs, handbooks and manuals on various aspects of economic cooperation and documents requested by intergovernmental economic groupings;
- (c) Indicating to other divisions and sections of ECA what are the requirements and priorities for economic cooperation which they should pursue in their respective sectors:
- (d) Cooperating, as necessary, in implementing the programmes of other divisions and sections of ECA and the African Programmes of United Nations Headquarters, Specialized and Operating Agencies of the United Nations, IDEP and similar organizations;

- (e) Following up former projects, sub-projects and visits by correspondence, elaboration of reports and recommendations, etc.;
- (f) Advising African Governments on adjustments to multinational economic groupings which would optimise the economic advantages of such groupings and fostering cooperation between existing multinational economic groupings in Africa and with economic groupings in other parts of the world.

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In the course of the quinquennium, it is expected that further specific projects and sub-projects may arise from the above sub-projects and continuing tasks.

II. <u>INTERNATIONAL TRADE</u>

Responsibility: TRADE AND ECONOMIC COOPERATION DIVISION
Trade Section

	STAFF RESOURCES									
		:	<u>D-1</u>	P-5	<u>P-4</u>	<u>P-3</u>	P-2/1	<u>GS</u>		
Division Direction										
	1967	4		1	<del></del> 1 1		<b>-</b>	1		
	1968			1	-	-	<del>-</del>	1		
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Trade Section					,			• . •		
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	1968		-	1	1ª/	3	4	4		
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	1970*			1	2	3	4	12		
	1971*		<b>-</b>	1	2	3	4 🐇	12		
Regional Advisers			2011 2011							
provided from project funds	1967		2							
	1968		2							
	1969*		2							
	1970*	· .	4							
	1971*		4불							

<sup>\*</sup> Proposed.

a/ Includes one staff member on detached duty from UNCTAD.

b/ One post transferred to "Economic Cooperation".

#### II. INTERNATIONAL TRADE

The main tasks in the field of trade during the quinquennium are two-fold:

- to follow up the possibilities of developing and expanding intraAfrican trade resulting from opportunities created by developments
  in industry, agriculture, transport and natural resources, and in
  particular those produced by closer economic co-operation among
  developing African countries;
  - to participate in the endeavours to rationalize the world trading system so as to ensure that the specific and legitimate requirements of African countries in this development are fully taken into account.

Within this general framework the secretariat will follow developments in trade and commercial policy of African countries, and of non-African countries in so far as they may have an influence on the economic growth of African countries, analyzing the main problems, formulating proposals for their solution and assisting in the design of means for the implementation of such proposals. In particular the secretariat will establish a regional trade promotion centre for Africa to contribute to the United Nations Export Promotion Programme as proposed by a meeting of executive secretaries of the regional economic commissions in January 1967 and endorsed by the Economic and Social Council in resolution 1362(XIV).

#### PROJECTS

### 8. Development and Expansion of Intra-African Trade

The work programme in respect of intra-African trade is closely connected with the progress made in economic co-operation among African countries. The projects in this field will therefore generally be co-ordinated with, and phased at the same rate as, work done in other fields such as industry, agriculture, transport and natural resources, taking into account the opportunities opened up for diversification and specialization by closer economic co-operation. In the light of the limitations thus imposed on the design and implementation of projects in the trade field, the following studies will be prepared during the quinquenmium in support of the general work of the secretariat in the field of economic co-operation:

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- (a) Studies of the Development of Trade in the West
  African Sub-Region
  - (i) Study of Existing Trade Systems in West Africa (1969-1970)

This study will include inter alia an analysis of tariffs and non-tariff barriers, external links and private commercial arrangements.

- (ii) Identification of Products which might be Considered for Trade Concessions in West Africa (1970-1971)
- (iii) Study on Trade Expansion in West Africa (1971-1973)

This study will concentrate on trade expansion on the basis of better use of existing industrial and agricultural capacities as well as future potential.

- (b) Studies of the Development of Trade in the East African Sub-Region (1969-1970)
  - (i) Study of Existing Trade Systems in East Africa (1969-1970)

This study will include <u>inter alia</u> an analysis of tariffs and non-tariff barriers, external links and private commercial arrangements.

- (ii) Identification of Products which might be Considered for Trade Concessions in East
  Africa (1970-1971)
- (iii) Study on Trade Expansion in East Africa (1971-1973)

This study will concentrate on trade expansion on the basis of better use of existing industrial and agricultural capacities as well as future potential.

- (c) Studies of the Development of Trade in the North
  African Sub-Region
- (i) Study of Existing Trade Systems in North

  Africa (1969-1970)

This study will include inter alia an analysis of tariffs and non-tariff barriers, external links and private commercial arrangements.

- (ii) Identification of Products which might be
  Considered for Trade Concessions in North
  Africa (1970-1971)
  - Study on Trade Expansion in North Africa (1971-1973)

This study will concentrate on trade expansion on the basis of better use of existing industries and agricultural capacities as well as future potential.

- (d) Studies of the Development of Trade in the Central African Sub-Region
- (i) Study of Existing Trade Systems in Central
  Africa (1969-1970)

This study will include inter alia an analysis of tariffs and non-tariff barriers, external links and private commercial arrangements.

- (ii) Identification of Products which might be
  Considered for Trade Concessions in Central
  Africa (1970-1971)
  - (iii) Study on Trade Expansion in Central Africa (1971-1973)

This study will concentrate on trade expansion on the basis of better use of existing industrial and agricultural capacities as well as future potential.

While they will be concerned principally with intra-subregional trade, these studies will also take into account related trade with surrounding countries not in the sub-region concerned.

Possibilities will also be explored for the production of more general studies, adapting theories of trade measures in economic cooperation to the specific conditions and requirements of African countries, analyzing experience gained both in Africa and in other regions, directed at finding practical solutions for these conditions and requirements. The following studies will be undertaken:-

(e) Study on the Means for Linking Trade Liberalization
to Investment Commitments within a Multinational
Grouping (1970)

This study will indicate the basis for multinational investment policies for foreign investors.

- (f) Study of the Problem of Origin of Goods in Trade
  Liberalization in Africa (1971)
- (g) Study of Methods for Liberalizing Trade in Specific

  Agricultural Commodities and Products within a MultiNational Grouping (1972-1973)

\_\_\_UNCTAD, UNIDO, FAC and GATT will be invited to cooperate. Other divisions and sections of the ECA will collaborate with the Trade Section as appropriate in the preparation of these studies.

The studies will be presented to meetings which will be called to consider sub-regional programmes of economic cooperation and will be made available to the secretariats of appropriate inter-governmental economic groupings as well as to Member States.

# 9. Expansion of Trade with Other Regions

The work programme in this field has been designed on the basis of problems and problem areas which have been identified during the first ten pears of the life of the Commission. With a view to assisting Africa governments in the deliberations and negotiations how under way in other bodies, in particular UNCTAD, to rationalize the world trading system, the work programme is formulated to make a shift from general studies to operationally-oriented analysis of specific questions. The following sub-projects will be undertaken during the quinquentium:

- (a) Studies on Trade in Commodities or Groups of Commodities of Thterest to African Countries
  - (i) Study of Trade in Selected Commodities (1969(
  - (if) Study of Trade in Selected Commodities (1970)
  - (iii) Study of Trade in Selected Commodities (1971)
  - (iv) Study of Trade in Selected Commodities (1972)
    - (v) Study of Trade in Selected Commodities (1973)

The commodities and groups of commodities to be studied in each year will be selected on the basis of decisions and recommendations of UNCTAD bodies, FAO Commodity Groups, etc.

In each case, the study will identify problems, discuss possible solutions and formulate proposals. Recommendations for inter-governmental arrangements will be reviewed and assessed in the light of their possible impact on African trade and development.

(b) Identification of Manufactured and Semi-Manufactured
Goods which are or could be Exported by African
Countries (1969-1971)

Existing trade systems in importing countries will be studies with particular emphasis on differential treatment between primary commodities and their semi-processed and processed forms.

(c) Analysis and Assessment of Proposals for a General System of Preference (1969-1970)

The analysis will consider <u>inter alia</u> product overage, duration of proposed agreements and special measures to be applied to the least developed among the developing countries.

- (d) Studies on the Development Prospects and the Special Problems
  of the Least Developed African Countries and of Measures to
  Promote their Development (1970-1971)
- (e) Proposals for Improvement of Trade with the Countries of
  Eastern Europe (1972-1973)

This study will include stages of multilateralization.

UNCTAD, UNIDO, FAO and GATT will be invited to co-operate in these studies. Other divisions and sections of the ECA will collaborate with the Trade Section as appropriate.

The studies will be made available to the secretariats of appropriate inter-governmental economic groupings as well as to member States.

# 10. African Export Promotion

(a) African Trade and Industrial Promotion Exhibitions

These exhibitions are intended to promote exports from African countries both within Africa and to other continents. The first of these exhibitions, which will be held every two years, is planned to coincide with the ninth session of ECA in Addis Ababa and will concentrate on small-scale industries:

- (i) African Trade and Industrial Promotion Exhibition (1969)
  - (ii) African Trade and Industrial Promotion Exhibition (1971)
  - (iii) African Trade and Industrial Promotion Exhibition (1973)

UNCTAD, UNIDO, GATT and other appropriate
Specialized and Operating Agencies of the United
Nations, the Union of International Fairs (UFI)
and the International Chamber of Commerce will be
invited to cooperate. Other divisions and sections
of ECA will collaborate with the Trade Section in
arranging these exhibitions.

- (b) ECA/GATT Courses on Foreign Trade and Commercial Policy
  - (i) ECA/GATT Course on Foreign Trade and Commercial Policy (English: 1969)
  - (ii) ECA/GATT Course on Foreign Trade and Commercial Policy (French: 1969)
  - (iii) ECA/GATT Course on Foreign Trade and Commercial Policy (English: 1970)
    - (iv) ECA/GATT Course on Foreign Trade and Commercial Policy (French: 1970)
    - (v) ECA/GATT Course on Foreign Trade and Commercial Policy (English: 1971)
  - (vi) ECA/GATT Course on Foreign Trade and Commercial Policy (French: 1971)
  - (vii) ECA/GATT Course on Foreign Trade and Commercial Policy (English: 1972)
  - (viii) ECA/GATT Course on Foreign Trade and Commercial Policy (French: 1972)
    - (ix) ECA/GATT Course on Foreign Trade and Commercial Policy (English: 1973)
      - (x) ECA/GATT Course on Foreign Trade and Commercial Policy (French: 1973)

These courses, which are a continuation of the series of courses held in previous years, will be run in collaboration with GATT.

Assistance will be requested from UNDP, through the Regional Programme of Technical Assistance.

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- (c) Establishment and Development of a Trade Promotion Centre for Africa (1969-1973)
  - (d) Meetings of the Working Party on Intra-African Trade

The Working Party, which has been meeting jointly with the OAU ad hoc Committee of Fourteen on Trade and Development, will continue to examine trade problems facing African countries and, in particular, the African approach to matters discussed or negotiated in other bodies such as UNCTAD and GATT.

Meetings will be held as follows:-

- (i) Meeting of the Working Party on Intra-African Trade (1969)
- (ii) Meeting of the Working Party on Intra-African Trade (1970)
- (iii) Meeting of the Working Party on Intra-African Trade (1971)
- (iv) Meeting of the Working Party on Intra-African

  Trade (1972)
- (v) Meeting of the Working Party on Intra-

#### CONTINUING TASKS

The following continuing tasks will be undertaken during the quinquennium:-

- (a) providing advisory services and undertaking advisory missions to Member Countries, on request, on matters relating to trade;
  - (b) preparing, as required, revising and re-issuing studies, documents and papers not linked with specific projects and sub-projects, including brochures, handbooks and manuals on various aspects of trade;

The state of the s

(c) cooperating, as necessary, in implementing the programmes of other divisions and sections of ECA and the African programmes of United Nations Headquarters, Specialized and Operating Agencies of the United Nations, IDEP and similar organizations.

In the course of the quinquennium, it is expected that specific projects and sub-projects may arise from these continuing tasks.

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# III. INDUSTRIAL DEVELOPMENT

Responsibility:

INDUSTRY AND HOUSING DIVISION 1

Industry Section

	STAFF	RESOURCE	<u>es</u>				
		<u>D-1</u>	<u>P-5</u>	<u>P-4</u>	<u>P-3</u>	P-2/1	GS
Division Direction	1967 1968 1969* 1970* 1971*	1 1 1 1	1 1 1 1	-		1 1 76 2 2 3 4 2 3 4 2 4 4	1 2 2 2 2
Industry Section	1967 1968 1969* 1970* 1971*	- - - - -	2 2 2 3 3	2 2 2 4 5	4 5 5 4 4	- · · · · · · · · · · · · · · · · · · ·	4 3 3 3 3
Regional Advisers Provided from project funds:	1967 1968 1969* 1970* 1971*	5 5 5 5 4			· ·		

<sup>\*</sup> Proposed.

<sup>1/</sup> The staff requirements for the direction of the Division are included under "Industrial Development".

#### III. INDUSTRIAL DEVELOPMENT

As a result of studies and surveys carried out by the ECA secretariat during the last five years, some of the major obstacles to industrialization have been identified. The most serious constraint is the small size of national markets in terms of population and of income per head. This imposes a limit on the extent to which African countries can produce manufactures economically, especially intermediate and capital goods. Other important obstacles are the shortage of technical know-how and entrepreneurial skills; non-existence of a complex of supporting machinery and institutions such as public and business administration, effective industrial promotion centres, and procedures for co-ordination of industrial legislation and incentives.

Specific action is required therefore to establish links between national markets and to harmonize industrial development programmes of groups of countries. This will help the growth of facilities for the production of intermediate and capital goods. It is also expected that cooperation will benefit the growth of import substitutes which will have to compete against large-scale production complexes in foreign countries.

It is in this framework that the work programme for the next five years has been established.

#### PROJECTS

#### 11. Harmonization Studies of Industrial Development Programmes

(a) <u>Harmonization Studies of Industrial Development Programmes</u>
(1969-1970)

During 1969 and in the first half of 1970, extensive subregional studies will be completed. These are viewed as major preparatory work for the second Development Decade, being persuasive evidence of the benefits which can be expected from a strategy of co-operative development. They are intended to illustrate the interactions between industrial development in various countries of the sub-region; to demonstrate to prospective partner States that a division or geographic dispersion of benefits is feasible; and to provide an early basis for detailed discussion with and between governments concerning integration problems. Each will include specific cost detail and suggestions concerned with the phasing of implementation.

#### (b) Meeting of Experts on Industrial Harmonization (1970)

This meeting is intended to test, in effect, the vulner-ability of proposals to be made to governments of the various sub-regions. This critique will isolate the potentially vulnerable key assumptions and attempt to catalogue and examine probable objections. It will be a stimulation of argument which can be expected to follow formal presentation.

Work on these sub-projects will be carried out in co-operation with African specialists released by governments. United Nations agencies such as CDPPP, UNIDO, FAO, UNCTAD and bilateral donors will also be invited to collaborate and to provide consultants.

#### 12. Examination of Investment Climate Factors

(a) Survey of Factors which Major Investors Examine and Techniques they use in making Assessments (1969)

The study is intended to provide a method of gauging incentives or disincentives of the African region relative to other areas of the world competing for investment and aid funds. It will also provide effective background for discussions with finance sources.

Bilateral donors will be invited to co-operate. The Fiscal and Monetary Affairs Section of ECA will collaborate with the Industry Section on the fiscal and financial aspects of this study.

# (b) Survey of Industrial Promotion Machinery in Countries Outside the Region (1969)

This study will be limited to those national units and area approaches which have been found to be particularly effective. This is regarded as essential background for work planned on African centres. Bilateral donors will be invited to cooperate in this survey.

# (c) Comparative Study of Investor-Related Legislation and Practices (1970-1971)

This study is intended to examine labour legislation, land tenure practices, tariff structures, taxation approaches and the range of controllable factors influencing investment decisions for areas within the region and for selected countries outside the region. It would provide one basis for gauging the appropriateness of practices in Africa. Also the accumulation of data for the region anticipates the requirements of industrial promotion centres (IPC's) and of discussions with investors. It will bring up to date regional work already undertaken by ECA.

Bilateral donors will be invited to co-operate in this study. The Fiscal and Monetary Affairs Section of ECA will collaborate with the Industry Section on the fiscal and financial aspects of this study.

# (d) Evaluation of National Development Plans Relating to Industrialization (1970-1972)

The purpose of this study is to define prospective finance gaps and to catalogue the key assumptions made by governments. Examples would be the scope of intended involvement, the proposed phasing of that development, and the anticipated costs and expected sources of finance. The study would both note these assumptions and comment on their vulnerability.

Other divisions and sections of ECA will co-operate with the Industry Section in undertaking this study.

#### 13. Fostering Development of Small-Scale Industries

(a) Survey of Governmental Policies and Institutions and Recommendation of Policies Concerned with Encouragement of Indigenous

Small-scale Manufacture

This will be a survey of current practices and institutional arrangements within African countries and in selected countries outside the region. Its purpose will be to enable member States to draw upon the experience of other countries and it will provide background for discussion with governments concerning specific problem resolution. Separate surveys covering French- and English-speaking countries within the region are planned.

- (i) Survey of Governmental Policies and Institutions for the

  Encouragement of Indigenous Enterprises in Selected Frenchspeaking Countries (1969-1970)
- (ii) Survey of Governmental Policies and Institutions for the

  Encouragement of Indigenous Enterprises in Selected Englishspeaking Countries (1970-1971)

Specialized and operating agencies of the United Nations and bilateral agencies will be invited to co-operate in this sub-project.

(b) Studies Relating to Model Schemes for Small-scale Manufacture

These studies are intended to define specific technical approaches to the problem of reducing the required scale of manufacturing to an economic level of operation under African conditions. These would be responsive to the regional constraints of small markets, scarce capital and shortage of skilled labour.

These studies will be undertaken on a product basis and each study will detail all technical aspects, including choice of technology. It will also include cost and profitability estimates for operation under a variety of situations and note sources of supply for the requisite machinery and raw materials. Finally, it will illustrate the expansion or grouping options in related fields:

- (i) Study of Model Schemes for Small-scale Manufacture of Selected Products (1969)
- (ii) Study of Model Schemes for Small-scale Manufacture of Selected Products (1970)
- (iii) Study of Model Schemes for Small-scale Manufacture of Selected Products (1971)
- (iv) Study of Model Schemes for Small-scale Manufacture of Selected Products (1972)
  - (v) Study of Model Schemes for Small-scale Manufacture of Selected Products (1973)

Specialized and operating agencies of the United Nations and bilateral agencies will be invited to co-operate in sub-projects (a) and (b).

### (c) Training Courses on Industrial Management Skills

Those are to be basic training courses in the fields of project evaluation, accounting, market analysis, and management control. Two courses will be held each year, one in a French-speaking country and one in an English-speaking country, with participation open to all countries of the region. During the quinquennium, the country locations will be changed each year to give the fullest possible opportunity for all member States to participate.

Courses will be held as follows:

- (i) <u>Training Course on Industrial Management Skills</u>
  (English: 1970)
- (ii) Training Course on Industrial Management Skills
  (French: 1970)
- (iii) Training Course on Industrial Management Skills
  (English: 1971)
  - (iv) Training Course on Industrial Management Skills (French: 1971)
  - (v) Training Course on Industrial Management Skills
    (English: 1972)
  - (vi) Training Course on Industrial Management Skills (French: 1972)
  - (vii) Training Course on Industrial Management Skills

    (English: 1973)
  - (viii) Training Course on Industrial Management Skills
    (French: 1973)

These courses will be jointly organized with IDEP. UNIDO, ILO and UNESCO will be invited to contribute to planning the content of the programme and assist in the instruction phase.

## 14. Investment Promotion

## (a) Meeting of Senior Government Officials and of Investors (1969)

This meeting will bring together members of African Governments at policy-decision levels and a comparably senior group of investors. It will be oriented towards non-contentious discussion of both government and investor points of view. The general objective will be to examine methods for attracting increased flows of foreign finance. Though not project oriented, it is anticipated that discussions initiated here will be followed by detailed inquiries at national and sub-regional levels concerning investment opportunities and projects.

UNIDO will be invited to collaborate in this sub-project.

## (b) Meeting for Industrial Investment Promotion (1969)

This meeting between government representatives and those from finance sources will be oriented towards speeding implementation of defined investment projects. The objective will be to bring governments with detailed investment proposals into direct discussion with interested finance groups.

The meeting will be organized jointly with UNIDO and is viewed as a regional continuation of the international programme begun by them in 1968.

Sub-projects (a) and (b) will take the place of the Working Party on Industry originally intended for 1969. Further, it is anticipated that both of these meetings will be followed in 1970 and 1971 by comparable approaches at the sub-regional level. It is hoped that these subsequent meetings will be convened by the appropriate inter-governmental economic groupings.

(c) Training Courses on Analysis and Implementation of Industrial

Investment Projects

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Annual training courses on the analysis and implementation of investment projects will be arranged as follows:

- (i) Training Course on Project Analysis and Implementation (English: 1970)
- (ii) Training Course on Project Analysis and Implementation (French: 1970)
- (iii) Training Course on Project Analysis and Implementation (English: 1971)
- (iv) Training Course on Project Analysis and Implementation
  (French: 1971)
  - (v) Training Course on Project Analysis and Implementation
    (English: 1972)

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- (vi) Training Course on Project Analysis and Implementation (French: 1972)
- (vii) Training Course on Project Analysis and
  Implementation (English: 1973)
  - (viii) Training Course on Project Analysis and Implementation (French: 1973)

These courses will be jointly organized with IDEP, ADB, IBRD, UNIDO national schools of business administration and management and bilateral donors will be invited to collaborate.

#### 15. Industrial Research and Standardization

(a) Study on Industrial Research and Standardization (1970-1971)

This sub-project involves the study of standards in current use and procedures for widening the scope of standardization at the country, sub-regional and regional levels.

The ECA Natural Resources and Transport Division will assist the Industry Section in carrying out this study.

#### CONTINUING TASKS

The following continuing tasks will be undertaken during the quinquennium:-

- (a) providing advisory services and undertaking advisory missions to member Countries, on request, in the field of industrial development;
- (b) preparing, as required, revising and re-issuing studies, documents and papers not linked with specific projects and sub-projects:
- (c) co-operating, as necessary, in implementing the programmes of other divisions and sections of ECA and the African programmes of United Nations Head-quarters and Specialized and Operating Agencies of

the United Nations, IDEP and similar organizations. This will entail, in particular, co-operation in respect of agro-allied industries with ECA/FAO Joint Agriculture Division and detailed co-ordination of the work programme of ECA and UNIDO;

- (d) following up former projects, sub-projects and visits by correspondence, elaboration of reports and recommendations, etc.;
- (e) compiling industrial information and statistics and keeping under constant review industrial trends in Africa and operation of plants already established to provide data concerning inefficient plants. The latter would facilitate assistance to governments, at their request, concerning ways of improving efficiency. The information will be collected in collaboration with ECA Research and Statistics Division and Sub-regional Offices, and with assistance from UNIDO;
  - implement selected multinational industrial projects. The sub-regional studies concerned with co-operative development are viewed as one form of demonstrating potential benefits and feasibility to the various governments. As more concrete evidence, however, it is planned that selected multinational development proposals will be brought to the point where meaningful discussion with potential investors or finance sources can logically be undertaken. A concerted effort will then be made to implement the proposals. Two benefits are anticipated. The first concerns demonstration effects and other encouragement for governments now contemplating economic co-operation. The second, and equally important, concerns what will be learned about the attitudes and requirements of both investors and governments in an actual

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water ver the control of successful in the first transformer and the first the con-

- decision situation. As a pilot project, information of the latter type can be expected to increase the effectiveness of most implementation programmes;
- (g) undertaking field studies of opportunities for smallscale industrial development. The intent here is for
  ECA staff members to become directly involved at the
  field level with study and implementation of small-scale
  industrial schemes. To facilitate this involvement and
  to make it more effective, it is planned that staff
  members will make periodic tours within the region.
  One objective will be to develop an effective level of
  familiarity with actual problems and opportunities.
  These tours would be followed by visits to the various
  countries, at their request, to assist in implementing
  programmes;
- (h) giving assistance to national industrial promotion centres. The aim is to assist governments in establishing national machinery for industrial promotion where it does not already exist and to advise all governments, at their request, on programmes and approaches which would improve the functioning of existing centres. It is thought that such centres in time will provide the most logical source of staff, information, and government contacts when sub-regional or multinational centres are created and become functional;
- (i) stimulating the creation of multinational industrial promotion centres. Negotiations will be initiated with member States at the sub-regional level concerning creation of multinational industrial promotion centres, and in other ways expedite the creation of such centres. The intended function of such groups is that of negotiating implementation and equitable distribution

of multi-national investment projects; the publicizing, both within the region and outside, of investment opportunities created by multi-national co-operation, general advice to governments concerning negotiations with outside investors, potential sources of international public finance, and development of appropriate and uniform investment incentives.

It is expected that during the quinquennium, further specific sub-projects may arise from the above projects and continuing tasks.

## IV. DEVELOPMENT OF NATURAL RESOURCES

Responsibility: NATURAL RESOURCES AND TRANSPORT DIVISION
Natural Resources Section.

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STAFF RESOURCES				
			<u>P-4 P-3</u>	<u>P-2/1 GS</u>
<u>Division Direction</u>	1967 1968	$\frac{1}{2}$		- 1 - 2
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Natural Resources Section	1967 1968 1969* 1970* 1971*	- 1 - 1 - 1 - 3 - 3	3 - 3 - 3 - 3 -	1 8ª/ 1 8ª/ 1 8ª/ 1 8ª/ 1 8ª/
Regional Advisers provided from project funds:	1967 1968 1969* 1970* 1971*	5 5 5 5 5		

<sup>•</sup> Proposed.

a/ Includes three technician draughtsmen.

#### IV. DEVELOPMENT OF NATURAL RESOURCES

The utilization of Africa's natural resources is crucial to development. Increased supplies of energy are basic to industrialization, to meet the needs of agricultural modernization and to expand transport networks. The development of water resources is essential to agricultural improvement and expansion, industrial development, the production of hydroelectric energy and the improvement of water transport facilities.

Exploration and exploitation of mineral resources are essential both to increase exports to earn foreign exchange and to develop a sound base for industrialization. The development of cartography is essential for the exploration and exploitation of natural resources, for agricultural development, for making decisions on the location of industry, for building up transport networks and for proper physical planning.

The problems involved are:-

- lack of knowledge about the natural resources of Africa;
- lack of trained manpower and inadequacy of institutional facilities to undertake the tasks involved in exploration for, and evaluation of natural resources;
- inadequacy or lack of mechanisms for integrating natural resources planning into development planning;
- inadequate familiarity with technological and economic developments affecting the exploration, evaluation trade in or domestic utilization of natural resources.

Any planned expansion of work in natural resources exploration and exploitation requires improvement in surveying and mapping on both a national and multinational basis. The case for multinational collaboration in natural resources work rests not only on the unevenness of the distribution of populations in relation to the physical size of the African countries and on the consequent need to plan self-sustaining industrialization on a multi-national basis but, also on the increasing sophistication and costs of modern methods of exploration, evaluation and exploitation.

This factor obliges the secretariat to place great weight on the creation or strengthening not only of national but also of multi-national machinery and institutions for designing and implementing effective programmes for accelerated work on natural resources. This is of particular importance in view of the rapidity with which science and technology is changing the scope of the concrete definition and altering the relative value of specific forms of natural resources with serious consequences for individual African countries.

During the coming decade African and other developing countries will be faced with several very grave and urgent problems in this field. Foremost among these are likely to be the economic impact of exploration and exploitation of mineral resources of the deep sea, the problems of resources of the continental shelf in relation to the definition of territorial waters, international action for the protection of the biosphere. It is for these reasons that the work programme places emphasis on the building of African capability not only in exploration and evaluation of natural resources for domestic use or for exports, but also in policy-making and planning.

#### A. Coordinated Development of Natural Resources

#### PROJECTS

- 16. Natural Resources Inventory, Planning and Management
  - (a) <u>Seminar on Modern Methods of Natural Resources Inventory</u>, Planning and Management (1969)

The object of this seminar is to familiarize senior officials, in planning ministries in particular, not only with modern techniques of inventory and management of natural resources but also with methods of calculating the natural resource component of development plans taking account of such dynamic factors as changes in technology, trends in world supply and demand, financial and other costs of alternative sources of supply as well as of substitution. Special attention will be given to problems of medium and long-term projections.

Assistance will be requested from UNDP, through the regional programme of technical assistance.

#### CONTINUING TASKS

The following tasks will be undertaken during the quinquennium:-

- (a) providing advisory services and undertaking advisory missions to member Countries and sub-regional economic groupings, on request, on natural resources inventory, planning and management;
  - (b) preparing, as required, revising and re-issuing studies, documents and papers not linked with specific projects;
  - (c) cooperating, as necessary, in implementing the programmes of other divisions and sections of ECA and the African programmes of UN Headquarters and Specialized and Operating Agencies of the United Nations, IDEP and similar institutions;

- (d) following up former projects; sub-projects and visits by correspondence, elaboration of reports and recommendations, etc;
- (e) establishing an Institute for Natural Resources
  Inventory, Planning and Management which will,
  inter alia, offer post-graduate courses.

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#### · B. Energy

Availability of the various forms of energy (electric energy, liquid fuels and other sources of thermal energy) must be planned to lead and not lag behind the general development of the economy; there must always be at least a small surplus of availability in comparison to demand for energy.

Availability of primary energy resources in particular African countries or sub-regional groupings is one of the most important factors influencing the energy policy to be adopted in the region. The main commercial, but exhaustible, kinds of primary energy resources (hydrocarbons, solid fuels and nuclear fuels) are very unevenly distributed throughout the region; seven out of forty countries are endowed with 95% of the total known reserves. Hydropower potential, an inexhaustible or steadily recurrent source of energy, is abundant in the sub-Saharian part of Africa. In West, Central and East Africa, Mozambique and Angola, about 95% of Africa's total hydropower potential exists; more than one-third of the total world potential.

Won-conventional sources of primary energy (geothermal, solar, nuclear wind and thermal energy of the sea) may become competitive with conventional energy sources in producing heat or electric energy. The feasibility of these kinds of energy sources must be examined, especially in the countries with conditions favourable to exploitation.

High energy prices inhibit the establishment of new industrial enterprises and the growth of existing industry. Domestic use of electric energy will spread to a large part of the population only if prices per kWh are relatively low. It is therefore imperative to keep energy prices in all countries as low as possible; at least in the long term this must be done without government subsidies. The cost price factor is considerably affected by developments in technology as well as in organization and management.

Manpower is one of the key problems, especially in the exploration of hydro-carbons and the use of electric power. Manpower development must take into account the training, not only of engineers technicians, economists and managers but also of adequate numbers of semi-skilled, skilled and highly-skilled workers.

This brief analysis of primary energy resources and some key problems of energy development indicates the main guidelines for a sound energy policy in Africa:

- Hydropower potential should be developed as much as possible in order to save the exhaustible energy resources for commercial purposes, as means of obtaining foreign exchange for general economic development.
- Countries rich in hydropower should produce electric energy not only for themselves but also for neighbouring countries not so well endowed.
- Larger hydropower projects are normally relatively cheaper than small ones. It is advisable therefore for neighbouring countries to develop projects on an international basis with high voltage interconnexion of their national electric power systems.
- New technologies for small-scale generation of hydro-power are in process of development and are of particular significance for rural development. Even in the case of substantial outputs of energy technological investigations hold the promise of reducing production costs by dispensing with the need for large and expensive dams. There is thus a wide spectrum of technological economic possibilities for the exploitation of Africa's abundant hydro-power resources both on a national and multi-national basis.
- In countries rich in commercial primary energy resources, but with relatively low hydropower potential, the available fuels should be used <u>inter alia</u> for generation of electric energy.

work in this field will therefore be concentrated on the exploitation of energy resources for development, particularly industrialization and the modernization of agriculture; the possibilities and advantages of sub-regional cooperation will be emphasized.

#### PROJECTS

### 17. The Development and Exploitation of Primary Energy Sources

(a) The Establishment of Sub-regional Permanent
Energy Committees

In view of the need for cooperation between adjoining countries and within sub-regions for the economic and effective development and exploitation of primary energy sources, permanent sub-regional inter-governmental machinery will be established to encourage cooperation in the energy field: to intensify and coordinate energy development. including the study of optimum economic and technological conditions for the exploitation, transport and utilization of energy resources in the sub-region; to study problems of mutual interest such as rationalization, standardization and safety rules for electrical inter-connexions: to define the legal framework of cooperation which would safeguard the interests of participating parties. Inaugural meetings will be arranged as follows:-

- (i) Meeting of the East African Permanent Energy
  Committee (1969)
- (ii) Meeting of the West African Permanent Energy
  Committee (1969)
- (iii) Meeting of the Central African Permanent Energy
  Committee (1970)
- (iv) Meeting of the North African Permanent Energy
  Committee (1970)

Once established, it is expected that these Committees will make arrangements for their own future meetings, programmes of work and continued functioning. ECA will provide the fullest assistance to these Committees that is within its resources.

### b) Survey of Manpower in the Field of Energy (1969)

A survey of manpower requirements and availability at the high and intermediate levels and of existing training facilities in the field of energy development in African countries will be undertaken.

Assistance will be requested from ILO, UNIDO and bilatered donors of technical assistance.

### (c) Second African Energy Meeting (1970)

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The first regional African Energy Meeting was held in 1963.

The proposed meeting, which is a sequel, will consider energy problems common to all sub-regions, taking into account the availability of various primary energy resources; geographical distribution of energy demand for industrial, mining and agricultural uses; long-distance transmission of electric power; financing of energy projects; manpower in the energy field; organizational and operational efficiency in the electric power industrial

## (d) Study on Long-distance Transport of Large Quantities of Energy (19

A study will be undertaken on the economic and practical aspects of long-distance transport of large quantities of oil and natural gas. The results of the study will be made available to member States and assistance will be offered in the implementation of recommendations made.

### 18. Developing the Production, Distribution and Utilization of Electrical Energy

## (a) Seminar on Production of Electric Energy (1969)

This regional seminar will concentrate on the organization necessary for the exploitation of sources

of electrical energy, particularly small-scale production of electrical energy which is of special importance to the modernization of agriculture and the general development of runal areas.

Most of the studies relating to the production of electrical energy in Africa have been concerned with high-head sites, yet many developing countries in Africa have only low-head river sites as potential hydropower sources.

Assistance will be requested from UNDP through the regional programme of technical assistance.

## (b) Seminar on Rural Electrification (1971)

In order to stimulate and assist the modernization of agriculture and rural development in general, a seminar will be held on rural electrification.

Assistance will be requested from UNDP through the regional programme of technical assistance.

(c) Study of Long-Distance Transport of Electric Energy and High-Voltage Integration of Grids (1971)

A study will be made on the economic and practical aspects of high-voltage integration of grids.

(d) Study on the Protection of Electrical Networks (1972)

A study will be made on the protection of electrical power networks against lightning and other atmospheric influences; against microbiologic agents and against parasites; birds and other animals.

(e) Working Group on Methods of Stimulating and Forecasting

Demand for Electrical Energy in African Countries (1972)

The failure to exploit potential resources of electrical energy hinders industrialization and the modernization of agriculture in African countries. Yet when such resources are developed, the supply often exceeds the demand in the short and medium terms. A working group will therefore be set up to study methods of stimulating demand for electrical energy in African countries.

### (f) Comparative Study of Electrical Energy Production Costs (1972)

A comparative study will be undertaken of electrical energy production costs, utilizing various primary energy forms.

(g) <u>Working Group on Rationalization in the Electric Power Industry</u>
(1973)

There is considerable scope for rationalization in the electric power industry to increase efficiency and productivity. A working group will therefore be setup to study this subject.

(h) Working Group on the Elaboration of General Conditions of Supply of Electrical Energy Applicable in Africa (1973)

A working group will be set up to recommend general conditions of supply of electrical energy applicable in Africa.

The studies and the reports on seminars and working groups mentioned above will be made available to member States and assistance will be offered in the implementation of recommendations made.

Co-operation will be sought in these projects from other interested organs of the United Nations.

#### CONTINUING TASKS

The following continuing tasks will be undertaken during the quinquennium:

- (a) providing advisory services and undertaking advisory missions to member States and sub-regional economic groupings, on request, on energy questions;
- (b) preparing, as required, revising and re-issuing studies, documents and papers not linked with specific projects, including enlarging and keeping up-to-date energy reports on a country and sub-regional basis prepared in the period 1965-1968;
- (c) co-operating, as necessary, in implementing the programmes of other divisions and sections of ECA and the African programmes of United Nations Headquarters and specialized and operating agencies of the United Nations, IDEP and similar organizations. This includes making surveys and analyses

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of specific energy problems, as required. Suggestions are given for specific projects which might be carried out by UNDP, other United Nations agencies or bilateral donors; for this purpose ECA provides, on request, background papers with suggestions on the proposed energy policy in the particular project. Work will be undertaken, in conjunction with interested member States and organizations, on a survey of energy resources in the area around Lake Kivu and their exploitation; a survey of the Gambia River's hydropower potential; exploration of gas deposits in the Lake Chad area; the development of Gouina hydropower potential on the Senegal River; the development of non-conventional energy sources, including geothermal energy, nuclear energy, oil shales and tar sands, thermal energy of the sea, tidal hydropower exploitation and wind energy;

(d) following up former projects, sub-projects and visits by correspondence, elaboration of reports and recommendations and the offer to give or obtain assistance in the implementation of recommendations made.

It is expected that, during the quinquennium, further specific sub-projects will arise from the above projects and continuing tasks.

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### C. Water Resources

competition for the use of water between the different sectors is expected to become more intense in the foreseeable future in most of the African countries. This will impose a burden of new and different standards of quality and quantity of water on these countries.

A number of factors are contributing to the challenges met in the development of water resources among which the following may be cited:

- The patent inadequacy of basic hydrologic data, manpower resources and equipment for the exploration, evaluation, development and management of these water resources.
  - The amplitude of Africa's endowment of river basin and lake systems which are not adequately developed and utilized.

    The fact that most of these river basins are shared by more than one country adds to the difficulties.
  - The marked variation in the ecological zones of Africa particularly the difference between the apparently water-short areas of the arid and semi-arid zones in contrast to the apparently well-watered areas in the equatorial belt.
    - The extremely rapid rise of African populations (expected to reach about 400 million by 1975) from the present estimated level of 330 million with a dependency ratio of about 47 per cent and the marked imbalance in their distribution.

Based on these considerations the work programme in the field of water resources aims at assisting member States to prepare themselves for meeting these challenges and takes into account the long-term strategy of water resources development and stresses the following:

- the need for the collection, classification and analysis of essential hydrometeorological data;
- the importance of undertaking surveys of the water resources and needs;

- the need to strengthen the national machinery regarding the planning of water resources development and the need of coordinated action by governments in respect of the study and
  the planning of the development of those river basins which
  are shared by two or more countries;
- the improvement of infrastructural services and developing education and training programmes for professionals and middle-level personnel required to carry out water resources development projects;
- the application of modern techniques and improved systems in the evaluation, exploration and development of water resources;
- the need to take full account of the health aspects of water development projects.

#### PROJECTS

## 19. Planning the Development and Use of Water Resources

The planning of water resources development has become a highly complex operation. Because of its importance in social and economic development the aim should be the optimum control, conservation and use of available and potential resources in the various geographical, climatic and economic circumstances encountered in the region. Already several river basin commissions have been created in Africa and hydrological surveys have been or are being undertaken by individual countries with the assistance of bilateral or multilateral donors of technical assistance.

During the quinquennium, efforts will be concentrated on:

- the collection, interpretation and use of hydrometeorological data;
- the strengthening of planning machinery for water development.

## (a) Planning of hydrologic networks

The situation revealed by the study "Major Deficiencies in hydrological data in Africa" completed in June 1966, has shown that the data

available on most countries are meagre, and often scattered among several ministries and agencies dealing with water resources. It is intended to organize joint teams of experts to visit the interested countries to examine and work out programmes for:-

- the establishment and/or expansion of hydrological observation networks;
- the establishment and/or the organization and improvement of hydrological services.

It seems clear that very little will be achieved in a subject of increasing urgency unless fresh initiatives are taken. It is envisaged that the field missions proposed will assist the countries not only on identifying problems but in formulating requests for assistance from United Nations and other sources. It is expected also that in the course of undertaking these tasks, specific projects and sub-projects may be identified.

This project will be executed in co-operation with WMO. It is intended to start it in 1969 with one country to be followed by others in subsequent years:-

- (i) Planning of Hydrologic Networks in a Selected
  African Country (1969)
- (ii) Planning of Hydrologic Networks in Selected
  African Countries (1970)
- (iii) Planning of Hydrologic Networks in Selected African
  Countries (1971)
  - (iv) Planning of Hydrologic Networks in Selected African Countries (1972)
  - (v) Planning of Hydrologic Networks in Selected
    African Countries (1973)
  - (b) Working Group of Experts on Water Resources Planning (1969)

The purpose of the Working Group is to define in terms of African and extra-African experience the nature and problems of water resources planning and implementation and to produce a synthesis which would

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not only serve as a guide to governments and
planners but would indicate weaknesses in machinery,
planning methodology and plan implementation which
would be the basis for specific corrective action.
The Group will be made up of both African and nonAfrican experts.

Assistance will be requested from UNDP through the regional programme of technical assistance.

(c) <u>Water Resources Development Institute in the East</u>
<u>African Sub-Region.</u>

A survey of the needs of the East African sub-region which could be met by the establishment of a water resources development institute was undertaken in 1965.

Views are presently being exchanged between the Secretariat, UNESCO and the governments of the sub-region to fix a date acceptable by all for an inter-governmental meeting to discuss the location of the institution, its draft charter, financial sources to meet capital and recurrent costs and the plan of operation. It is expected that work will begin on the establishment of the Institute following the intergovernmental meeting planned for 1969. The exact nature of the subsequent work and its stages will depend on the recommendations of the meeting:-

(i) Meeting on the Establishment of a Water Resources

Development Institute in the East African

Sub-Region (1969)

UNESCO will be invited to cooperate in the running of this meeting.

(d) Seminar on Water Resources Planning (1970)

The meeting of the above-mentioned Working Group of experts on Water Resources Planning will be followed by a seminar for African development planners in order to familiarize them further with the specific problems of water resources planning.

This seminar will be organized in cooperation with IDEP.

## (e) Conference on African Hydrology and Hydro-Meteorology (1971).

It is almost eight years ago that the first interAfrican Conference on Hydrology took place (Nairobi 1961).
The time has come for a new assessment of African
hydrology and an exchange of views between hydrologists
and the users of hydrologic data. This conference will
be held in the framework of the International Hydrological
Decade. While a number of scientific topics will be discussed, stress should be laid on practical problems.

UNESCO, WMO, FAO and OAU will be invited to co-operate.

# (f) Study Tour on International River Basin Development for Participants from Central and Northern Africa (1971)

Arrangements were made for officials in charge of river basin and lake development projects in the West African Sub-Region (1967) and in the East African Sub-Region (1968) to visit the United States of America to acquaint them with the experience of the more advanced countries in tackling problems related to the development of large river basins. Similar arrangements will be made in 1971 for a study tour by officials from the Central African Sub-Region to a suitable host country.

Assistance will be requested from UNDP through the regional programme of technical assistance.

# 20. The Application of Science and Technology to Water Resources Development.

Modern scientific and technological advances can assist both in the development and conservation of water resources and in minimizing adverse side-effects of their exploitation. Every effort will be made to encourage Member States to make use of such advances in appropriate cases. During the quinquennium, efforts will be concentrated on :-

- the techniques of conservation of water resources;
- the control of parasitic diseases as an aspect of water resources development;
- the use of modern techniques in the exploration of ground water;
- the technology and economics of water desalination.
- (a) Seminar on Recent Developments in the Conservation of
  Water Resources with Special Reference to Arid and
  Semi-Arid Zones (1970)

The object will be to present an up-to-date picture of experiments and tested methods of water conservation taking into account experiences in appropriate countries such as Australia.

The Seminar will be organized in collaboration with other United Nations and bilateral agencies and assistance will be requested from UNDP through the regional programme of technical assistance.

(b) ECA/WHO Conference on Parasitic Diseases and Water Resources Development (1970).

The incidence of water-borne and water-related parasitic diseases has increased in Africa during recent years due to increased water resources development. The technology of rural water supplies, in general and of small-scale water storage works in particular, designed to mitigate or eliminate the propagation of water-borne and water-related diseases is of critical importance and has been under consideration by ECA for some time. The conference will discuss the economic aspects of parasitic diseases, the effect of loss of manpower production and productivity, cost of curative measures and the most effective technology for eliminating these diseases and preventing their spread.

WMO and other appropriate multi-lateral and bilateral agencies will be invited to collaborate.

(c) Regional Seminar on Modern Techniques of Sub-Surface Water
Exploration, including the Use of Nuclear Techniques and
Isotopes (1971)

In developing countries where hydrological data are scarce, environmental isotope technique can provide valuable information at relatively low cost and in comparatively short time. A regional training seminar on this subject will be arranged.

IAEA and other interested organizations will be invited to collaborate. Assistance will be requested from UNDP through the regional programme of technical assistance.

(d) Seminar on the Technology and Economics of Water
Desalination (1972)

It is expected that by 1972 developments in the technology and economics of saline water desalination will have reached a state in which desalination is practicable for providing water for semi-arid African countries. In collaboration with the Resources and Transport Division of the Headquarters, a seminar on this subject will be arranged.

Other appropriate UN agencies will be invited to collaborate. Assistance will be requested from UNDP through the regional programme of technical assistance.

21. Assessment of Manpower Needs and Development of Training Facilities

for Water Resources Development

In order to enable effective planning of water resources development to be undertaken, it is necessary to make assessments for manpower needs and to ensure that adequate training facilities exist or are developed.

The following sub-projects will be undertaken during the quinquennium:-

(a) West African Meeting on Manpower and Training for Water Resources Development (1969-1970)

In 1963, a survey was undertaken of the requirements and availability of various categories of personnel for water resources development and of the related education

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Training and Research facilities in the West African sub-region.

A meeting of representatives of governments in this sub-region and of representatives of specialized agencies and interested donors will be convened to discuss the recommendations and measures to be undertaken.

(b) Survey of Manpower and Training Needs for Water Resources

Development in the East African Sub-region (1970)

A survey of the requirements and availability of various categories of personnel and of education, training and research facilities in the East African sub-region will be undertaken. The data obtained will be analysed and a report on the findings will be distributed to member States in the sub-region.

UNESCO, FAO, WMO, IIO and other interested multilateral and bilateral agencies will be invited to collaborate.

(c) East African Meeting on Manpower and Training for Water
Resources Development (1971)

A meeting of representatives of governments in the East African sub-region and of representatives of the specialized agencies and interested donors will be convened to discuss the recommendations and measures to be undertaken following the execution of project (b).

As a result of the sub-projects detailed above, it is expected that further sub-projects will be identified before 1972.

Co-operation will be sought in those projects from other interested organs of the United Nations.

#### CONTINUING TASKS

The following continuing tasks will be undertaken during the quinquennium:

(a) studying the development potential of and the use of water in river basins shared by two or more countries, with a view to initiating international co-operation.

- (b) providing advisory services, on request, to governments and inter-governmental agencies in respect of the developments of national and international river basins;
- (c) providing assistance to governments, on request, in securing bilateral and multi-lateral aid in the conduct of studies and surveys of international and other river basins;
  - (d) preparing, as required, revising and re-issuing studies, documents and papers not linked with specific projects and sub-projects, on various aspects of water resources development;
  - (e) co-operating, as necessary, in implementing the programmes of other divisions and sections of ECA and the African programmes of United Nations Headquarters and Specialized and Operating Agencies of the United Nations, IDEP and similar organizations;
  - (f) following up former projects, sub-projects and visits by correspondence, elaboration of reports and recommendations etc.
  - (g) as a part of the United Nations five-year plan for the development of natural resources, surveys of available water resources and water needs in "potentially water-short areas" will be undertaken in co-operation with the Resources and Transport Division at Headquarters and other appropriate agencies. The main purpose of the survey is to collect and analyse data on present needs and future growth requirements over the next 10-20 years. It is expected that specific projects and sub-projects could then be identified and elaborated. A survey of five countries which have large areas which are "potentially water-short" will be undertaken in 1969 and 1970;

It is expected that, during the quinquennium, further specific sub-projects will arise from the above projects and continuing tasks.

#### D. Minerals

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In recent years the mining and mineral industries of Africa have been one of the most rapidly growing sectors of the economy as a whole. Africa's share of total world output of many major minerals has been growing rapidly and mineral exports (including the value of gold) account for 49 per cent of the continent's total export earnings. However, this growth has been based essentially on mineral discoveries of the pre-independence period and, if it is to be maintained, active efforts must be made to strengthen African geological surveys and mining departments, both by assisting them in carrying out immediate projects and by providing adequate training facilities for professional personnel to meet future requirements. In both aspects of this endeavour it is necessary to economize in the use of scarce human and financial resources. For this reason, it is planned to establish sub-regional working parties of senior professional personnel, in which the representatives of participating countries can discuss common problems, acquire a broader view of problems and possible solutions and establish a practice of mutual consultation and co-operation.

Similarly, it is planned to consider in these working parties the need on a regional or sub-regional basis for high quality professional training institutions in the earth sciences and mining engineering, as well as the need for other technical supporting institutions such as mineral research centres.

Another objective is the encouragement of the use of African mineral resources for Africa's own industrialization through the local processing of crude ores and the establishment of local industries based on the resulting products.

ECA's programme for encouraging mineral development in the region may be summarized as follows:

- the encouragement of collaboration and co-operation amongst
African countries in all aspects of mineral development
through the establishment of sub-regional working parties
of senior officials in this field;

- the strengthening of the technical basis for future mineral development through the establishment, on a regional or sub-regional basis, of high-quality professional training institutions for African nationals in the fields of geology, mining engineering and the earth sciences; and through the establishment on a regional or sub-regional basis of mineral research institutes equipped to deal with specific African problems.
- assistance to African countries in planning for the local processing and utilization of minerals as a basis for industrialization in Africa whenever possible.

In the long-term strategy for maximizing the contribution of African mineral resources to African development, the concepts of regional and sub-regional co-operation, as exemplified by the proposed working parties and of manpower training and research facilities, are of fundamental importance. The following programme has been designed to integrate these elements with each other and to support them with selected specific projects aimed at meeting more immediate needs. PROJECTS

## 22 Planning for the Exploration and Exploitation of Mineral Resources.

In order that the mineral resources can be discovered and exploited for the benefit of the African countries, it is necessary to educate and train a sufficient number of high-level African personnel in the fields of geology, mining and oil technology. It is also essential that facilities for mineral research be established in Africa to offer research and analytical services both to geological surveys engaged in exploration, and to mining companies engaged in exploitation of mineral resources. Likewise, geologists and mining engineers now in service should broaden their experience and knowledge of modern techniques. Assistance is required in making pre-feasibility studies of potentially economic technical processes.

To these ends the following sub-projects will be undertaken in the quinquennium:-

(a) East African Working Group Meeting on Higher Education and Research Centres in the Field of Mineral Development (1969)

A working group primarily of heads of geological surveys and mining departments of governments in the East African sub-region will be held to consider the need for the establishment of (i) university-level professional educational centres for geologists and other professional personnel in the earth-sciences, mining engineering and oil technology and (ii) the proposed mineral research centre. Special attention will be paid to the recommendations of the participants in the Seminar on New Metals and Minerals held in Addis Ababa from 5 to 10 February 1968 in connexion with: undertaking studies on the ore-dressing of economic minerals associated with African carbonatites and ascertaining to what stage the processing of the new metals and minerals could be carried cut in Africa.

(b) West African Working Group Meeting on High Education and Research Centres in the Field of Mineral Development (1969)

A Working Party primarily of Heads of Geological Surveys and Mining Departments of Governments in the West African sub-region will be held to consider the need for the establishment of (i) university-level professional educational centres for geologists and other professional personnel in the earth-sciences, mining engineering and oil technology and (ii) the proposed mineral research centre.

(c) Study of Petroleum and Natural Cas Agreements (1969)

Action has begun on collecting copies of agreements in the field of petroleum and natural gas exploration and exploitation. These agreements will be analysed and a critical study of their previsions will be sent to Member States.

# (d) Central African Working Party Meeting on Higher Education and Research Centres in the Field of Mineral Development (1970)

A working party primarily of heads of geological surveys and mining departments of governments in the Central African subregion will be held to consider the need for the establishment of (i) university-level professional educational centres for geologists and other professional personnel in the earth sciences, mining engineering and oil technology, and (ii) the proposed mineral research centre.

## (e) Seminar on Modern Methods of Exploration and Prospecting with Special Reference to Petroleum and Natural Gas in Africa (1970)

The object of the seminar will be to familiarize members of government departments and institutions concerned with mineral, petroleum and natural gas prospecting and exploration with up-to-date methods in their field.

Assistance will be requested from UNDP through the regional programme of Technical Assistance and from other interested organs of the United Nations.

## (f) North African Working Party Meeting on Higher Education and Research Centres in the Field of Mineral Development (1971)

A working party primarily of heads of geological surveys and mining departments of governments in the North African sub-region will be held to consider the need for the establishment of (i) university-level professional educational centres for geologists and other professional personnel in the earth sciences, mining engineering and oil technology, and (ii) the proposed mineral research centre.

# (g) Study Tour for Geologists and Mining Engineers from East and Central Africa to Developed Countries (1971)

A study tour to selected developed countries will be arranged for geologists and mining engineers from East and Central Africa to acquaint them with modern developments in the mining and mineral field.

- Assistance will be requested from UNDP through the regional programme of technical assistance.
  - Study Tour for Geologists and Mining Engineers from North and West Africa to Developed Countries (1972)

A study tour to selected developed countries will be arranged for geologists and mining engineers from North and West Africa to acquaint them with modern developments in the mining and mineral field.

> Assistance will be requested from UNDP through the regional programme of technical assistance.

(i) Study on Raw Materials for the Fertilizer Industry (1973)

A study will be undertaken on the means of discovery, development and production of mineral raw materials for the fertilizer industry, particularly sulphur, in Africa.

As a result of the four sub-Regional working party meetings on higher education and research centres in the field of mining development, it is expected that further sub-projects (including working party meetings to consider inter-governmental agreements on establishment of centres, agreement on detailed plans for their establishment and their location) will be identified for implementation from 1971 onwards.

### CONTINUING TASKS

. The following continuing tasks will be undertaken during the quinquennium :-

(a) collection and dissemination of information on African mineral resources development, production and trade. This will include the publication of papers submitted to the Seminar on New Metals and Minerals held in 1968;

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- (b) as suggested at the Seminar on New Metals and Minerals held in 1968, a list of experienced geologists and other technical personnel in the field of mineral resources development and production in the employment of African Governments has been compiled and distributed to Member States. This list will be revised from time to time;
  - (c) Data will be supplied to the Cartographic Unit for the preparation of minerals maps for Africa. A coal map has already been produced and it is hoped to produce, during the quinquennium, maps of iron-ore resources (1970), copper resources (1971), phosphate resources (1972) and bauxite resources (1973);
    - (d) assistance will be given to African Governments, on request in strengthening their geological survey and mining departments. Studies will be undertaken and advice given on the economic aspects of mineral exploration and exploitation, and on trends in world and regional trade in minerals.

In the course of the quinquennium, it is expected that further specific projects and sub-projects may arise from the above sub-projects and continuing tasks.

#### E. Cartography.

Despite the fact that adequate maps together with related basic survey and cartographic data constitute an indispensable tool for efficient planning, execution and administration of development prejects in various economic and social fields, most of the African countries are, still far from having the necessary modern technical facilities, including technical personnel and instruments, equipment and installations, to carry out the surveying and mapping work to provide these maps and data. Experience has shown that the lack of reliable maps and data required for a project often leads not only to inefficient and uneconomical execution, but sometimes to complete failure. The secretariat's activities in the field of surveying and mapping have

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therefore been focussed on the development of technical capabilities in the continent through advice and help in the development of survey and cartographic services, regional seminars and conferences to examine problems in surveying and mapping and their practical solution, multinational institutions for training national staff in up-to-date techniques in selected aspects of surveying and mapping. Provision is also made for the establishment of multinational institutions for undertaking aerial surveys and other specialized activities beyond the capacity of individual governments. To improve the efficiency of cartographic and survey work in general, a study is under way on the need for, design and functions of a research institute in aerial surveying.

### PROJECTS

23. Establishment of Regional Centres for Training in Photogrammetry, Photo-Interpretation and Airborne Geophysical Surveys

The purpose of this project is to provide common facilities for on-the-job training of technical personnel in branches of photogrammetry and airborne geophysical surveys. The training programmes of a centre as well as its technical and financial requirements were worked out by an ECA Meeting of Experts held in 1965. Six African Governments have offered to act as host for the centre. The report of the ECA mission which surveyed the proposed sites was circulated to governments in 1967 and a draft text for the inter-governmental instrument establishing the centre, in 1968.

(a) Multinational Meeting for Establishment of Regional Centres for Training in Photogrammetry, Photo-Interpretation and Aero-geophysics (1969)

The meeting, at which the interested governments should agree on the inter-governmental instrument establishing the centres and on the location, is to be convened in 1969.

(b) Establishment of a Centre for Training in Photogrammetry, Photo-Interpretation and Airborne Geophysical Surveys (1969-1970)

. With the course starting in the latter part of 1970, an expert should be appointed in the beginning of 1970 to carry out the preparatory work for the opening and operation of the Centre.

(c) Establishment of a Second Centre for Training in Photogrammetry and Airborne Geophysical Surveys (1973)

On the basis of experience gained in the operation of the first Centre, the second Centre could be established in 1973. As in the case of the first Centre, an expert should be appointed in that year.

24. Establishment of Common Centres for Specialized Services in Surveying and Mapping

The common centres are designed to carry out for interested governments surveying and mapping work which requires such highly specialized techniques and expensive sophisticated equipment that an African country alone cannot afford to set up one technical service by itself and for itself.

A general plan including technical and financial details for the setting up of such centres was worked out in 1966 by an ECA meeting of experts. Eight African Governments have offered to act as host for a centre. The report of the ECA mission which surveyed the sites was circulated to governments in 1967. A draft text for the inter-governmental instrument establishing the centre has been prepared.

(a) <u>Multinational Meeting on Establishment of Common Centres in</u>
Surveying and Mapping (1969)

The meeting at which the interested governments should agree on the inter-governmental instrument establishing the centres and on the locations, is to be convened in 1969.

(b) Establishment of a Centre in Surveying and Mapping (1970-1971)

In order to start the operations in the latter part of 1970 or early part of 1971, an expert should be appointed in 1970 to take charge of the preparatory field work.

# (c) Establishment of the Second Centre in Surveying and Mapping (1973)

On the basis of the experience gained with the operation of the first centre, a second centre could start in the later part of 1973. An expert should be appointed to carry out the preparatory field work.

# 25. Establishment of a Comprehensive Research Institute for Aerial Surveys

Aerial surveys techniques providing more efficient means for rapid mapping of large areas, have been used to advantage in Africa.

Difficulties have been encountered in their application to African environment. Research work under African conditions to deal with African problems is required in order to derive full benefit from these techniques which are still in the stage of further developments. The establishment in Africa of an institute to carry out such research was recommended by the Second United Nations Regional Cartographic Conference for Africa and the recommendation was confirmed by the Commission by resolution 164(VIII).

An aide-memoire in the form of a preliminary working paper was sent, in 1968, for comments to all governments, members and associate members of ECA, as well as to UNESCO, FAO and OAU. The result of these consultations would enable the Secretariat to prepare a more detailed note concerning the need for, and design of, the institute.

In the preparatory work for the establishment of the institute, the steps followed in the case of the training centres mentioned above will again be applied.

(a) Meeting of Experts on a Research Institute for
Aerial Surveys (1988)

The meeting of experts will be convened in 1969 to work out the technical plan and financial requirements.

(b) <u>Multi-national Meeting on Establishment of a Research</u>
Institute for Aerial Surveys (1971)

A meeting of interested governments will be called in 1971 to agree on the inter-governmental instrument establishing the institute and its location.

# (c) Establishment of a Research Institute for Aerial Surveys (1971-1972)

It is expected to start the operation of the institute in the later part of 1971, or early part of 1972. An expert should be appointed in 1971 to carry out the preparatory field work.

# 26. Third United Nations Regional Cartographic Conference for Africa (1971).

The United Nations regional cartographic conferences are called under resolutions of the Economic and Social Council at regular intervals to strengthen international cartographic co-operation in dealing with questions of common interest to the region. The first such conference for Africa was held in 1963 and the second in 1966. The third conference will be held in 1971.

### 27. Seminars and Training Courses

The following seminars and training courses will be arranged:-

### (a) Seminar on Cadastre (1970)

Many development projects in African countries have been seriously handicapped by the difficulties associated with the determination of rights over land. A seminar will be held in 1970 to review existing systems, discuss problems encountered in Africa and assist African governments in establishing or improving their land registration systems.

Assistance will be requested from UNDP through the regional programme of technical assistance.

(b) Orientation Seminar on the Role of Surveying and Mapping in Development Projects (1971).

The lack of progress in meeting the requirements for surveying and mapping work in a number of African countries has been caused by a lack of sufficient understanding, on the part of planners and policymakers of the need for surveys and maps and of
the possibilities opened up by modern techniques in
these fields. A seminar will be held in 1971 to
promote African countries' understanding of the
need for surveying and mapping in the planning
ofldevelopment projects.

Assistance will be requested from UNDP through the regional programme of technical assistance.

(c) Training Seminar on New Techniques in Surveying and Mapping (1972).

A seminar will be held in 1972 to review newly developed techniques in surveying and mapping and discuss their applicability in Africa for the purpose of improving the efficiency of national cartographic services in carrying out their surveying and mapping programmes for development projects.

Assistance will be requested from UNDP through the regional programme of technical assistance.

## 28. Meeting on Topical Mapping (1970).

Topical maps of various African countries are based on uncoordinated specifications established by the various publishers separately. They are often not suitable for preparation of composite maps required for sub-regional or regional planning. A meeting of topical specialists and cartographers will be held in 1970 to plan a cooperative programme and to prepare common specifications for selected topical maps to meet current and prospective African requirements.

## 29 Survey of Manpower in the Field of Cartography (1972).

A survey of manpower in the whole field of cartography will be carried out in 1972 for the purpose of strengthening institutional training facilities to meet present and expected future needs for high and middle-level manpower in all branches of surveying and mapping.

## CONTINUING TASKS

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The following continuing tasks will be undertaken during the quinquennium:-

- (a) maintaining the ECA Map Documentation and Reference
- (b) collection and dissemination of cartographic information and, in particular, publication of the African Cartographic Information Bulletin;
  - (c) organization of map exhibitions;

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- (d) provision of advisory services, on request, to Member States:
- (e) follow-up work on completed projects, on resolutions of sessions of the Commission and on recommendations of subsidiary bodies.

In the course of the quinquennium, it is expected that further specific projects and sub-projects may arise from the above sub-projects and continuing tasks.

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### V. TRANSPORT AND COMMUNICATIONS

Responsibility: NATURAL RESOURCES AND TRANSPORT DIVISION
Transport and Telecommunications Section

### STAFF RESOURCES

	<u>D-1</u>	<u>P-5</u> <u>F</u>	<u>P-3</u>	P-2/1	<u>GS</u>
Transport and Telecommunications	1967 -	_	2 4	1	2 /
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Regional Advisers provided from project funds:	1967 3 <u>b</u> / 1968 6 <u>b</u> / 1969* 6 <u>b</u> /
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	1971* 6b/

<sup>\*</sup> Proposed.

The staff requirements for the direction of the Division are included under "Development of Natural Resources".

a/ Includes one GS provided from technical assistance funds.

b/ Includes three Regional Advisers supplied by the ITU for service in the ECA/ITU Unit.

### V. TRANSPORT AND COMMUNICATIONS

The development of a national economy in most African countries is hampered by the lack of transport and communications facilities. This is even more true in economic relations with neighbouring countries. Transport links are therefore essential for expansion and integration of national and multihational markets and for ensuring adequate outlets for the products of industrialization and agricultural improvement.

The development of tourism to which many countries look as a source of foreign exchange earnings also depends on the availability of facilities which permit free movement to and within countries.

### Transport

Although individual African countries are investing more than 25 per cent of their national budgets on improvement and extension of their transport and communications systems, external help and effort are urgently needed, inter alia, because:

- the existing transportation links were designed to meet the needs of overseas trade and were not intended to serve long-term development on a regional basis;
- of the lack of adequate numbers and quality of scientific, technological and managerial personnel for handling transport development programmes.

The work programme in this field is therefore designed to:

- identify the missing transport links between the countries and amongst sub-regional groups of countries;
- forecast the demand for transport facilities in the light of expected growth in the different sectors of national and regional economies;
- make a comparative cost analysis of the different modes of transport which could affect trade between countries;
- recommended the choice of mode or modes of transportation that are best suited to present and foreseeable needs;

- determine the region's quantitative and qualitative needs for manpower in transportation with a view to establishing a regional transport institute for the training of higher transport officials, especially at the managerial level; and
- set up inter-governmental working groups to examine transport problems, to propose solutions, and to promote the development of integrated transport systems.

### PROJECTS

### 30. Development of Co-ordinated International Transport Systems in Africa

Extensive studies have been made or are being undertaken by the secretariat and by individual African countries with assistance from United Nations agencies and bilateral donors of technical assistance. It is hoped that the Study of Transport Studies in Africa now being undertaken by UNDP will shortly be available for use by the secretariat and interested States.

Inter-governmental working groups will be established in each of the four sub-regions and their first task will be to examine these and other transport studies, and to establish a programme of action to implement agreed proposals leading to the creation of co-ordinated international transport systems, initially on a sub-regional, and ultimately on a regional, basis.

The following sub-regional meetings will be held:

- (a) <u>Central African Sub-regional Working Group on Transport Meeting</u> (1969)
- (b) East African Sub-regional Working Group on Transport Meeting (1969)
- (c) North African Sub-regional Working Group on Transport Meeting (1970)
- (d) West African Sub-regional Working Group on Transport Meeting (1971)

As a follow up to the sub-regional working group meetings, regional meetings are planned to programme the coordination of transport links, multi-national application for funds and the implementation of the Africa transport programme. These meetings, which are intended to bring together the ADB, UNDP, IBRD, bilateral donors and other financing agencies as well as the interested countries, will be held as follows:

- (e) Regional Transport Meeting (1972)
- (f) Regional Transport Meeting (1973)

### 31. Development of Air Transport in Africa

The uncoordinated development of air transport through a multiplicity of national airlines is wasteful and uneconomic. The secretariat has carried out studies to determine action necessary to develop air transport within Africa and between Africa and the rest of the world as an instrument to serve economic and social development. The studies have paid particular attention to the formation of an African Civil Aviation Commission and the establishment of multi-national sub-regional airlines. To discuss these studies and to decide on further action, the following meeting will be held:

# (a) <u>Meeting to Establish an African Civil Aviation Commission</u> (1969)

In accordance with Resolution 159(VIII) and the Programme of Work and Priorities Item 66 approved at the eighth session of the Commission, the secretariat has arrived at an agreement with the OAU and ICAO on the constitution, objectives and functions of the proposed AFCAC. A meeting will be held in January 1969 to constitute the commission. The objectives of this commission will be:

- to provide the Ministries responsible for civil aviation in Africa with a framework within which to discuss and plan all the required measures of coordination and cooperation for their civil aviation activities;
  - development of African air transport.

This meeting will be run in cooperation with OAU and ICAO.

The ECA will, in collaboration with ICAO and OAU, offer assistance to the commission in the preparation of studies, implementation of programmes of cooperation between and integration of sub-regional airlines, provision of experts and consultants, etc.

### 32. The Development of Maritime Shipping

The secretariat will give technical advice, substantive support and guidance to member countries, on request, on the establishment, effective administration and technical operation of consultative machinery and shippers councils.

Assistance will be given to governments, on request, in the preparation of long-term plans for the selective development and modernization of ports, based on current and future needs and technological changes.

Technical advice and support will be given to member countries, on request, on the development of merchant marine and the establishment of sub-regional or regional merchant fleets.

The following specific sub-project will be undertaken during the quinquennium:

# (a) Working Group of Experts on the Development of Maritime Shipping (1969)

The working group of experts will consider the development of maritime shipping and the standardization and stabilization of maritime freight rates. Concrete action to be taken thereafter will depend on the recommendations of the working group.

### 33. Development of Inland Water Transport

It is generally conceded that inland water transport is the cheapest form of inland transport. It is of course limited to those areas which have potentially navigable rivers and lakes. Africa, with its 54 rivers and deepwater lakes, can develop this economic source of transport which will link more countries together for the promotion of its trade.

### (a) Study of Inland Waterways (1970-1971)

It is intended to extend during the quinquennium the study of inland waterways already begun with the Niger and Senegal rivers to determine the economic advantages of inland water transport, particularly in areas where no other means of transport are available.

### CONTINUING TASKS

The following continuing tasks will be undertaken during the quinquennium:

- (a) providing advisory services and undertaking advisory missions to Member Countries, on request, in all fields of transport;
- (b) preparing, as required, revising and re-issuing studies, documents and papers not linked with specific projects and sub-projects, including:
  - (i) Studies of specific inter-connexion of African railways;
  - (ii) Preliminary studies of the possibility of a Trans-African railway.

- (c) following up former projects, sub-projects, visits and topics by means of correspondence, elaboration of reports and recommendations, further visits, including:
  - (i) Establishment of an African Transport Institute;
  - (ii) Road Research Development;
  - (iii) Chad Basin transport network;
  - (iv) Niger navigability study;
  - (v) Trans-West African Highway.

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- (d) servicing and support of inter-governmental Working Parties in all fields of transport;
- (e) giving assistance and support to the Association of African-Airlines (AAFRA);
- (f) cooperating, as necessary, in implementing the programmes of other divisions and sections of ECA and the African programmes of United Nations Headquarters, Specialized and Operating Agencies of the United Nations, IDEP and similar organizations.

In the course of the quinquennium, it is expected that further specific projects and sub-projects may arise from the above sub-projects and continuing tasks.

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### B. <u>Telecommunications</u>

African countries still have not enough direct telecommunications links between themselves. Recently, Niger has been able to establish links with Dahomey, Upper Volta and Mali. The latest link is that established, with the help of UNDP, between Ethiopia and Ivory Coast. The Commission, in association with ITU, is promoting a programme of an African telecommunications network. The problems which African Governments face are costly routings, delays and general unsuitability of existing systems for the development needs of their countries, individually and collectively.

### CONTINUING TASKS

An application for UNDP assistance has been discussed by ITU, ECA and UNDP and an agreed request is expected to be submitted to UNDP Governing Council in 1969. The implementation of this project will involve:

- (a) giving assistance in the assessment of requirements for the establishment of intra-African telecommunications links, provision of equipment and ad hoc training, as requested by countries, and in the coordinated utilization of aid sources:
- (b) organizing and conducting telecommunications pre-investment surveys and establishment of implementation plans for national, intra-African and inter-continental telecommunication systems, taking into consideration the findings of ITU's Regional Plan Committee for African and the General Plan for the development of the international network;
- (c) undertaking feasibility studies of the manufacture within the region of telecommunication equipment and components on a sub-regional basis or otherwise;

- (d) setting up national and regional training schemes to meet the demand for technical personnel which will arise from the development of telecommunications, giving special attention to the development of institutional facilities within the region for education and training at all levels and in all aspects of the subject;
  - (e) promoting financing schemes for the development of telecommunications in Africa;

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(f) giving technical assistance on specific subjects, as required, in the field of telecommunications by African countries.

In the course of the quinquennium, it is expected that specific projects and sub-projects may arise from these continuing tasks.

### C. Tourism

In most African countries, tourism is a new enterprise. In many places the basic infrastructure - hotels, roads, transport, game-parks, etc. - have not been developed. The work in this field, therefore, aims at the development of direct tourist services as well as supporting attractions.

### PROJECTS

### 34. Development of Tourism in Africa

The secretariat has already carried out studies on tourism in the North African and East African sub-regions and is undertaking a study in the Central African sub-region. A study is now being undertaken in the West African sub-region by United Nations Headquarters in collaboration with the African Development Bank. The secretariat will hold the following meetings to consider these reports and to decide what further action needs to be taken:

- (a) Meeting of Experts on Tourism in the North African Sub-Region (1969)
- (b) Meeting of Experts on Tourism in the East African Sub-Region (1969)
- (c) <u>Meeting of Experts on Tourism in the Central African Sub-Region (1970)</u>
- (d) Meeting of Experts on Tourism in the West African Sub-Region (1971)

### CONTINUING TASKS

The following continuing tasks will be undertaken during the quinquennium:

(a) providing advisory services and undertaking advisory missions to member Countries, on request, on matters relating to tourism;

- (b) preparing, as required, revising and re-issuing studies, documents and papers on tourism not linked with specific projects and sub-projects;
- (c) arranging for training of personnel to provide tourist services, including direction of fellowships to countries where facilities exist for training hotel personnel, guides, etc.;
  - (d) cooperating, as necessary, in implementing the programmes of other divisions and sections of ECA and the African programmes of United Nations Headquarters, Specialized and Operating Agencies of the United Nations, IDEP and similar organizations;
  - (e) following up former projects, sub-projects and visits by correspondence, elaboration of reports and recommendations, etc.

In the course of the quinquennium, it is expected that specific projects and sub-projects may arise from these continuing tasks.

### VI. FISCAL AND FINANCIAL QUESTIONS

Responsibility: TRADE AND ECONOMIC COOPERATION DIVISION Fiscal and Monetary Affairs Section

### STAFF RESOURCES

	<u>D-1</u>	<u>P-5</u>	<u>P-4</u> <u>P-3</u>	<u>P-2/1</u>	GS
Fiscal and Monetary Affairs Section	1967 <b>–</b> 1968 <b>–</b>		2 1 2 1	1 ( A. )	1 2 2 <u>a</u> /
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Regional Advisers provided from project funds	1967 1				
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<sup>\*</sup> Proposed.

<sup>1/</sup> The staff requirements for the direction of the Division are included under "International Trade".

a/ Includes one GS provided from technical assistance funds.

# VI. FISCAL AND FINANCIAL QUESTIONS STONE ALARMAN AND FINANCIAL QUESTIONS

Now that planning machineries have been set up in most of the African countries for accelerating their rates of growth, the need for proper harmonization of fiscal and budgetary procedures and policies with development planning is being greatly felt as this is vital to ensure the successful implementation of the plan. The budget as an instrument for the allocation of resources is the financial medium for the implementation of the plan. Despite the need for close link between budgeting and planning, it has been observed that it is in practice often weak and inadequate. individual projects and schemes included in the plan do not often spell out all the financial implications, e.g. foreign exchange component included in total cost, annual recurring expenditure after completion, breakdown of costs by major items, sources of financing envisaged and estimates of annual income from operation of project, etc. There is therefore urgent need for establishing firm procedures for the formulation, scrutiny and approval of development schemes so that such lacunae are removed. There is also urgent need for improving the budgetary classification system to make it more meaningful for economic policy formulation and the techniques for revenue forecasting have to be developed so that proper emphasis is placed on increasing mobilization of domestic resources for development. Increased inflow of foreign resources also generates pressures for the mobilization of additional local resources needed for utilizing foreign assistance. The increasing cost of debservicing also imposes additional burdens every year. The taxation and fiscal structure of the different countries have therefore to be geared to the task of meeting these additional demands. with the constant with the second of the se 三分音 化硫化 医水流 的复数化棒式 抗

Reform of the taxation structure to bring it in line with development requirements of different countries and to gradually broad base it in line with progressive principles of taxation and giving incentives for investment is also long overdue. As agriculture is still an important sector of the economy in most African countries, the system of taxation of agriculture needs to be reformed. An overall study on patterns of

financing in different African countries would bring into focus new areas which could be tapped for raising additional revenues and better tax administration.

There is not only need for studies in depth on budgetary and fiscal problems but also the necessity for discussing these problems widely in seminars and conferences so that proper awareness is created for the solution of these problems.

The tasks in the field of benting and monetary questions have to be related to the new stage of development in African countries where account should be taken of growing emphasis on the development of neglected areas within the countries themselves and of economic co-operation at the sub-regional level. Hence two kinds of problems call for special attention: improvement of banking infrastructure and economic incentives needed for development and elaboration of some sub-regional patterns for payments or clearing arrangements necessary for trade liberalization between the countries of the sub-region concerned. The secretariat will further service the Association of African Central Banks until the technical secretariat to be established by that organ will be in a position to take over the major part of the research work on questions involving increased co-operation among African central banks.

### PROJECTS

- 35. Harmonization of Fiscal and Budgetary Procedures and Policies with Development Planning
  - (a), Study of Procedures for the Formulation, Scrutiny and Approval of Development Projects and their Reflection in Plans and Budgets (1969)

Realistic budgeting is of great importance in ensuring proper implementation of development programmes. It often suffers due to lack of proper procedures for the formulation, scrutiny and approval of development projects. In order to help the adoption of such procedures the study would devise model proforms for giving full information on new projects and schemes and make suggestions for the setting up of proper machinery for their speedy scrutiny and clearance before their reflection in the plans and budget.

The Research and Statistics Division and the Public

Administration Section of ECA will assist the Fiscal and

Monetary Affairs Section in preparing this study.

(b) Study on the Formulation of Time-Table for the Preparation of
Annual Development Programmes and their Reflection in
Budgets (1969)

The procedures for the preparation of Annual Development Programmes have not taken firm shape in many African countries. In view of three different fiscal years followed by African countries, three different sets of time schedules are proposed to be worked out to serve as models for adoption.

(c) Study on Techniques of Revenue Forecasting (1969)

A realistic forecast of resources likely to become available during the ensuing years has to precede any attempt at the formulation of an Annual Development Programme to be reflected in the budget. The study would therefore make suggestions for improvement of techniques of revenue forecasting so that the domestic resources that could be mobilized for development could be projected on a realistic basis.

(d) Country Studies on the Harmonization of Fiscal and Budgeting
Procedures and Policies with Development Planning (1969-1970)

A comparison of the existing procedures in selected African countries would be made with the proposals outlined in the studies mentioned above in order to highlight the improvements expected with the adoption of new procedures. Initially, one country would be covered from each of the four sub-regions.

### (e) Seminar on Budget-Plan Harmonization (1970)

The seminar proposes to create proper awareness of the problem and to provide opportunities for comparative evaluation and discussion so that different countries could adopt solutions best suited to their circumstances.

Assistance will be requested from UNDP through the regional programme of technical assistance. The Research and Statistics Division of ECA will assist the Fiscal and Monetary Affairs Section in undertaking this seminar.

# (f) Study of Progress Reporting and Follow-up of Development Budgets (1970)

There is urgent need for establishing machinery for watching implementation of development programmes and removing any bottlenecks that may be noticed during the course of implementation. The study would examine various aspects of progress reporting and evaluation of programmes.

The Research and Statistics Division of ECA will assist the Fiscal and Monetary Section in preparing this study.

## (g) Study on Accounting and Audit Structures (1970-1971)

The study will examine various aspects connected with the harmonization of accounting and audit systems with requirements of development planning and implementation and orientation of budgetary systems gradually to programme and performance budgeting.

# (h) Study of Municipal Budgeting and Mobilization of Local Resources for Development (1971-1972)

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The establishment of proper budgetary systems in the institutions of local government, like municipalities, etc., is of great importance in mobilizing local resources for development.

In view of the large numbers and diverse nature of the scope and functions of such bodies in different countries the study would concentrate attention on important sources of local revenues and areas of local expenditure and their budgeting under a more or less uniform classification pattern.

The Public Administration Section of ECA will assist the Fiscal and Monetary Section in preparing this study.

# (i) Preparation of Case Studies on Performance Budgeting (1972-1973)

In order to furnish the decision makers with meaningful information for taking budgetary decisions it is necessary to change the structure of the budget from one based on objects of expenditure to one based on programmes, projects and activities. In view of the requirement of establishing unit costs for different projects and activities in order to successfully establish the system of performance budgeting it may not be possible to introduce this system straight away in all departments of government. This has to be done gradually. In the first stage this may be introduced in a few selected development projects in each country, the end products of which can be rendered in physical terms. The ECA would provide assistance to any countries that show interest in the preparation of such project studies.

The above studies will be made available to all member States and to the secretariat of inter-governmental economic groupings in Africa.

## 36. Studies of Fiscal and Financial Policies and Legislation

(a) Study on Patterns of Financing Public Sector Investment in Selected African countries (1970)

In a situation of expanding public sector both on account of increase in administrative and investment expenditures, mobilization of additional resources for public sector investment

should be the major and continuing concern of planners and budgeters. The study therefore proposes to analyse the existing financing patterns in selected African countries so that the areas from whome additional resources could be mobilized are brought to focus.

### (b) Study of Agricultural Tax Systems (1971)

Agriculture being still the major sector of the economy in most of the countries, its contribution towards finding resources for development should be commensurate with its importance in the economy. The study would examine the scope for reforming agricultural tax.

## (c) Seminar on Agricultural Tax (1971)

The seminar would provide a forum for comparative study of agricultural tax laws and systems in different countries and make recommendations for desired reforms.

Assistance will be requested from UNDP through the regional programme of technical assistance.

- (d) Study of Personal Tax Law System and Administration (1972)
- (e) Study of Customs, Excise and Sales Tax Law and Systems (1973)
- (f) Study of Property Tax Law and Systems (1973)

Each of these studies, which will be undertaken on a comparative basis in respect of selected African countries, will include analysis of the provisions relating to assessment, collection, enforcement and administration of the taxes and duties concerned.

The studies will be made available to all Member States and to the secretariats of inter-governmental economic grouping in Africa.

(g) Study on Rationalization of Fiscal Incentives given for Accelerated Industrial, Agricultural and Housing Development (1973)

Fiscal incentives can play a decisive role in accel ting the pace of development in different sectors. The feasibility of introducing such incentives in key sectors of industry, agriculture and housing would be examined and the need for keeping these under review would be stressed.

Other ECA divisions and sections will assist the Fiscal and Monetary Affairs Section in the preparation of this study.

- 37. The Establishment and Improvement of Institutions and Facilities to Finance Development
  - (a) Association of African Central Banks
  - (i) Study of the Possibility of Establishing a Monetary Research
    Centre (1969-1970)

When the Association of African Central Banks comes formally into being by the end of 1968, possibilities will be explored for the establishment of a Monetary Research Centre to assist the Association with studies on various problems emerging and with training.

The IMF and the IBRD will be asked to cooperate.

(ii) Comparative Study of Central Bank Legislation and Operations
in Africa (1969-1972)

A comparative study of central bank legislation and operation in Africa will be undertaken to provide African countries with a basis for analysing and improving their legislation in this field.

The study will be made available to member States and to the Association of African Central Banks.

(b) Study of Economic Incentives and Allied Legislation for Industrial Development and Capital Investment (1969-1970)

This study will consider fiscal and financial, incentives and allied legislation for the promotion of capital investment in Africa. Work already done on investment laws in Africa will be expanded and brought up to date, and agreements with large foreign enterprises will be considered.

The study will be made available to member States.

(c) Study of Commercial Banking Systems in Selected African Countries
(1971-1973)

This study is intended to present an up-to-date picture of the legislative and organizational aspects of commercial banking systems of selected African countries, both the more developed and the less developed, and to make recommendations.

The study will be made available to member States.

(d) Study of the Mechanisms for Development Financing in Africa
(1972-1973)

This study, which will be undertaken on a comparative basis, will collect and analyse information on the mechanisms used for development financing in African countries. The study, which will be made available to member States, is expected to create a comparative basis for the improvement of development financing mechanisms.

## 38. Establishment of an African Payment and Clearing Union

As a continuation of work already done on the possibilities of establishing a compensation and payments union in Africa, work will continue on this problem, account taken of sub-regional economic communities in Africa recently established. Thus the general solution of this problem will be approached by elaborating some sub-regional patterns for payments or clearing arrangements conceived at the transitional stage to a pan-African payments union. Accordingly, two studies will be of high priority:

- (a) A study on Payments or Clearing Arrangements needed for Trade Liberalization along the Partners to the West African Group (1969-1970)
- (b) A Study on Payments or Clearing Arrangments needed for Trade

  Liberalization between the Members of the East African Community

  and Countries Applying for Membership of this Community

  (1971-1973)

## CONTINUING TASKS

The following continuing tasks will be undertaken during the quinquennium:

- (a) providing advisory services and undertaking advisory missions to member States, on request, on fiscal and financial questions
  - (b) preparing, as required, revising and re-issuing studies,
    documents and papers not linked with specific projects and
    sub-projects, including brochures, monographs, handbooks and
    manuals on fiscal and financial questions. In particular, studies
    will be undertaken on financing related to trade; studies made
    by other organizations will be analysed and recommendations made
    to member States;
  - (c) Co-operating, as necessary, in implementing the programmes of other divisions and sections of ECA and the African programmes of Specialized and Operating Agencies of the United Nations, IDEP and similar organizations;
  - (d) Following up former projects, sub-projects and visits by correspondence, elaboration of reports and recommendations, further visits, etc.;
    - (e) achieving close liaison with African countries and their advisers;

- (f) watching progress of Budget-Plan Harmonization Project in different countries;
- (g) implementation of project progress reporting and follow up action required in watching implementation of developing programmes and their evaluation;
- (h) providing secretarial services for the Association of African Central Banks as long as this organization is not in a position to establish and operate its own secretariat.

In the course of the quinquennium, it is expected that further specific projects and sub-projects may arise from the above sub-projects and continuing tasks.

# VII. AGRICULATURE

Responsibility: ECA/FAO JOINT AGRICULTURE DIVISION

### STAFF RESOURCES

ECA/FAO Joint Division	Agricul	<u>ture</u>	1967 1968 1969* 1970*		1ª/ - - 2	2ª/ 2ª/ 4ª/ 4ª/ 4ª/	6ª/ 6ª/ 7ª/ 6ª/ 5ª/	1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	5 6 8 11
			1971*	1 <u>2</u> /	2	4ª/	5 <b>ª</b> /	2 <u>a</u> /	12
Regional Advis		funds:							
	- <b>-</b>		1967 1968	1 1					
			1969* 1970* 1971*	1	÷	• .			. •

<sup>\*</sup> Proposed.

a/ Includes staff made available by FAO; the Division Director, one professional at level 4, one at level 3 plus one at level 2/1 from 1968.

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### ACRICULTURE

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Although agriculture occupies a dominant position in the overall economy of Africa, the progress of the agricultural sector in most African countries has been rather slow. Agricultural production is hardly keeping pace with population growth, and food production, in particular, is falling short of the demand for higher consumption and better nutrition standards.

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The structure of agriculture in the continent is dominated by a subsistence pattern of production and a general low level of productivity. A number of factors have contributed and are contributing to this unhappy state of affairs among which the following may be quoted:

- lack of technical knowledge and of the know-how of modern means of production as a result of slow progress in research, and a failure to place such technical knowledge as is available at the disposal of producers for application at the field level;
- a low level of infrastructural and institutional services to agriculture;
- low levels of application of production inputs;
- a general lack of awareness of waste in handling, marketing and storage, as well as wasteful habits of consumption of agricultural produce;
- inadequate planning, and plan implementation;
  - a general lack of awareness of possibilities of regional cooperation in agricultural production and trade.

The agricultural programme of the Commission must aim at improving this situation by assisting Nember States in the rational development of their agricultural resources

to enable production to meet domestic demand for food and other agricultural commodities and external market demand.

The policy for such a programme must stress:

- stimulation of production in both the traditional and modern sectors, in line with internal and external market demands, and flow of production from national to larger sub-regional and world markets (see in particular project No. 39);
- application of modern techniques and improved means of production;
- improvement of infrastructural and institutional services to agriculture through increased extension of advisory credit, marketing and transport facilities to producers and adoption of land reform policies;
- improvement of data collection and supply of commodity and other relevant production, consumption, and trade data to planning organizations;
- modernization of agricultural education and training.

The achievements of these objectives is primarily the responsibility of national governments and should be provided for in national development plans. The programme of the Commission must, however, provide for assisting governments in the identification of socio-economic factors influencing the progress of agricultural development, in developing physical and human resources and in mobilizing financial resources. These objectives demand the assessment, in each country, of:

- existing capital goods, including livestock and inputs such as fertilizers, selected seeds and insecticides;
- present level of application of technical know-how;
- the level of existing education and extension personnel and facilities;

- existing social and traditional methods and institutions such as those pertaining to the land tenure systems;
- credit and the credit mechanisms available for its application;
- the nature and availability of research facilities for control and development of programmes and projects;
- presence of adequate basic infrastructure, including administrative organization;
- level of housing, sanitation and nutrition;
- current progress in development planning with respect to food and agriculture.

The programme of work should take account of the long-term strategy and perspective for overall African agricultural development aimed at in the FAO's Indicative World Plan.

The new understanding between the ECA and FAO Secretariats that there should be one UN agricultural programme in Africa and that the FAO Regional Conference will constitute the sole UN forum for discussions of the strategy of agricultural development in Africa holds bright hopes for effective co-operation between the two Organizations towards modernization of the agricultural sector.

#### PROJECTS

### 39. Intra-Regional Co-operation and Trade in the Field of Agriculture

To enable formulation of concrete action programmes under this project, studies have to be carried out in each of the four sub-regions of Africa in three phases as follows:-

(a) The first phase involves preliminary economic intelligence studies of short - medium - and long-term domestic and external market demands for selected commodities, and an examination of country and sub-regional production, consumption and trade patterns to ascertain the extent to which

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production meets internal and external demands for each product and of the impact of trade in the selected commodities between the countries of the sub-region, between various sub-regions and between Africa and the other regions on the expenditure and earnings of foreign exchange at national and sub-regional levels. These studies should enable identification of areas of concern, and priorities of needs within those areas. Phase I will be undertaken for all sub-regions by staff members of the ECA/FAO joint Agriculture Division in collaboration with various FAO Divisions.

The second phase will involve both extensive and (b) intensive field investigations by teams of experts deployed from various ECA Divisions, FAO Headquarters. FAO Regional Offices in Africa and elsewhere, and possibly from amongst EPTA country assignees, other specialized and operating agencies, bilateral sources and universities. In certain particular cases it may be necessary to recruit on a temporary basis. The proposed teams of experts would include specialists in the fields of agronomy, crop protection, agricultural industries, animal health and production, agricultural economics, hydrology, soils, rural institutions (organization of agricultural services, land reform credit and co-operatives). agricultural engineering, horticulture, marketing, statistics, general economics, nutrition, education and training, according to requirements indicated by phase I studies.

> The work of these teams should include a careful examination of the pattern of current agricultural practice; should compare this with development possibilities and recommend measures for initiating improvements and new developments. The teams should also attempt to identify specific projects.

(c) The third phase will examine the feasibility of allocating and reallocating resources to make the best use of the comparative advantages of different countries and sub-regions, and to encourage the maximum utilization of under-used and unused resources. This should enable the formulation of policies and action programmes to improve agricultural productivity, and of development projects, aimed, in total, at enabling production to keep pace with growing demand for the most important staple food commodities and for industrial raw materials.

By the end of 1968, phase I of the project for the North and Central African sub-regions will have been revised and co-ordinated with the Indicative World Plan (IWP) and ECA studies on the basis of ECA/FAO discussions. The following programme is envisaged for the quinquennium:-

- (a) In 1969, phase I of the project for the East and West African sub-regions will be compiled and the detailed terms of reference of phase II for all sub-regions will be worked out in consultations between ECA and FAO, based on the phase I reports and the IWP and submitted to Member States. Between September and December, joint missions of ECA, FAO and, if possible, IBRD will visit the countries in the North, Central and East African sub-regions to discuss and agree on these terms of reference.
- (b) In January and February 1970, a similar joint mission will visit the countries in the West African subregion to discuss and agree the terms of reference.

  At the same time, the phase II field work in the Central and North African sub-regions will begin.

  By the end of 1970, phase II in the Central and North African sub-regions will be completed and preparations will be made for the commencement of phase II in the East and West African sub-regions.

- (c) By the end of 1971, phase II will be completed in the East and West African sub-regions and projects in phase III for the North and Central African sub-regions will be formulated.
- (d) In 1972, projects in phase III for the East and West African sub-regions will be formulated and phase III projects in Central and North African sub-regions will be implemented and followed up.

### 40. Marketing of Agricultural Products

Improving the efficiency of agricultural marketing is a continuing high priority requirement for increasing economic growth in Africa. During the quinquennium, efforts will be concentrated on:

- Livestock and meat;
- Grain and

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- Fish.

## (a) Livestock and Meat

As far as livestock and meat are concerned,
the main preoccupations will be to study existing
marketing arrangements in order to make proposals,
bearing inter alia on production, transport and trade,
to widen marketing possibilities on a multi-national
basis. Work is at present under way in the West African
sub-region, and during the quinquennium work will proceed
on:

# (i) Study on Tripartite Trade in Livestock and Meat in Niger, Upper Volta and Ghana (1969)

The study on tripartite trade in Niger,
Upper Volta and Ghana will be completed. Efforts
will be made to have the study followed by
negotiations aimed at the promotion of an agreement between these countries. It is hoped that
by the end of the first year of the quinquennium,
both the study and negotiations will be completed.

(ii) Study on Promoting Market Flows in Livestock
and Meat between Sahelian and Forest Ecological
Zones (1969-1973)

A study will be undertaken on the broader aspects of promoting market flows between the sahelian and forest ecological zones in cooperation with, and with the material support of, other relevant agencies. Efforts should be made during the quinquennium to implement such action programmes as the study may suggest as it proceeds.

(b) Study on Price Stabilization and Commercialization of Grain (1969-1973)

The main concern is to secure the expansion of the commercial production of grain. Assistance will continue to be given, on request, on the development of price stabilization programmes, and study will be undertaken of the relationship between price stabilization and commercialization. Attempts will be made to organize a pilot project in each of Niger and Upper Volta which, taking account of present knowledge and proposals, will disclose the economic and technical difficulties of and possibilities for accelerating the commercialization of grain production.

## (c) Fish

Study will be made of the salient features of trade in fish between neighbouring African countries and steps will be taken to increase the efficiency and volume of this trade. In particular the following studies will be undertaken:-

## (i) Study of Fish Trade in West Africa (1969-1970)

The trade between coastal and neighbouring land-locked countries in West Africa will
be studied with attention to inland fisheries
and to the relations between fish and meat trades;

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# (ii) Study of the Inland Fish Trade in East and Central Africa (1969-1970)

The inland fish trade of Uganda and neighbouring countries will be studied.

### 41. Collection, Exchange and Distribution of Information

This project entails:-

- the collection and analysis of agricultural information in the African countries;
- the preparation and distribution of agricultural information for the countries in the region;
- the publication of information on agricultural activities.

The following publication will be published during the quinquennium:-

(a) Agricultural Economics Bulletin (semi-annually).

### CONTINUING TASKS

The following continuing tasks will be undertaken during the quinquennium:-

- (a) providing advisory services and undertaking advisory missions to Member Countries, on request, in the field of agriculture, including:-
  - (i) the level of operational efficiency of agricultural Ministries and agencies is an important bottleneck in African economic development and particular attention will be given in the quinquennium, to strengthening research services, and improving the flow of research findings by assisting in developing more effective extension services. This work will have implications for training and manpower programmes, and its success will make an important contribution to project 39;

- (ii) development programmes sometimes encounter difficulties because of existing systems of land tenure. In the course of the quinquennium, and particularly in connexion with the implementation of project 39, advisory services such as those now being provided to Ethiopia and other countries will be made available to governments who find it necessary as part of their development programmes to ensure greater security of tenure to tenants by specific measures of land reform.
  - (b) giving assistance to and maintaining liaison with universities, research institutes and other agricultural institutions and organizations. special effort during the quinquennium, assistance will be given to research organizations in Africa both in carrying out their tasks and in exchange of information. Preliminary studies of the existing status of manpower requirements including research in Africa, have been completed, and studies of future additional requirements will be continued. In co-operation with bilateral donors and foundations, support will be given to the African Association for the Advancement of Agricultural Sciences. co-ordination of research in the Sudanian ecological zone will be extended to cover other ecological zones in Africa;

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- (c) preparing, as required, revising and re-issuing studies, documents and papers not linked with specific projects and sub-projects, including:
  - (i) a contribution to the short-term Annual Review of State of Food and Agriculture published by FAO;

- (ii) a contribution to the medium-term Food Outlook
  Review to be undertaken on a continuous basis,
  covering a period of four to five years and
  meant to close the gap between the short-term
  review and the longer-term FAO Commodity
  Projections and IWP Projections
- (d) co-operating, as necessary, in implementing the programmes of other divisions and sections of ECA and the African programmes of Specialized and Operating Agencies of the United Nations, IDEP and similar organizations and participating in seminars, courses, working parties, etc., organized by FAO, IDEP and other organizations.
- (e) following up former projects, sub-projects and visits by correspondence, elaboration of reports and recommendations, etc.

In the course of the quinquennium, it is expected that further specific projects and sub-projects may arise from the above sub-projects and continuing tasks.

#### VIII. HUMAN RESOURCES DEVELOPMENT

Efforts at achieving rapid economic development in the Africa region are being seriously handicapped by a host of complex social and human factors. Inadequacies in structure and procedures of central and local administration - coupled with acute shortages of high- and middle-level executive personnel - tend to slow down the urgent task of preparing, implementing and managing national development programmes.

Rigid social and property structures, including age-old land-tenure systems, inflexible customs, philosophies of traditional life and irrational attitude to work, etc., are tending to obstruct the pace of social change and the modernization process to which all newly-independent African countries are committed. Human motivational factors and the determination of communities to achieve progress can go a long way in overcoming social obstacles to development. Furthermore, in a situation where living standards in health, nutrition, education and housing are generally very low, physical capital applied for development cannot be expected to achieve much.

Experience in agricultural and industrial development in Africa has amply shown that the technical requirements for improving productivity are relatively easy to determine. But what has proved to be more difficult is precisely how to induce the acceptance of such technical improvements by tradition—bound communities.

The basic problem of development in Africa is therefore a social and human one, which calls for an objective study, understanding, and development of African human resources in order both to provide the due incentives to progress and to facilitate the application of modern science and technology.

Thus, any attempt to improve the present level of production in African economies must necessarily be accompanied by an objective improvement of African human resources and of the social situation.

Through social research, education, improvement of health and nutrition, organization and management and the spread of rational attitudes to life and work, African communities need to be motivated and prepared to overcome social rigidities, to accept new ideas and to adapt themselves to the modernization process.

Since 1 January 1968, a Division of Human Resources Development has been established with the main purpose of:

- grouping together those units of the Secretariat whose functions and activities impinge more directly upon: the improvement of the quality of the African human resources; social enlightenment and the raising of levels of living; promotion of popular support and motivation for local and national development; promotion of maximum involvement and participation of broad social groups in national development; and better utilization of African human resources, through improved organization, administration and better management;
- fostering, within the context of the Commission's programme and development strategy, an integrated approach and concerted action for promoting the development and utilization of African human resources and of the capacity of the social elements for national development; and
- advising, encouraging and assisting Member Governments to determine and implement appropriate policies and programmes in these fields.

The Division comprises three Sections: Social Development, Manpower and Training; and Public Administration. The collective functions and activities of these Sections have been oriented, in order to provide the necessary impetus and support to the two main objectives defined in the Secretariat's development strategy for the next quinquennium - industrialization and modernization of agriculture.

### VIII. HUMAN RESOURCES DEVELOPMENT

#### A. Social Development

Responsibility: HUMAN RESOURCES DEVELOPMENT DIVISION Social Development Section

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Division Direction	1967 1968 1969* 1970* 1971*	- 1 1	1 1 1 -	1 1 1 1		1 1 1 1	1 1 1 1
Social Development Section	1967 1968 1969* 1970* 19 <b>71</b> *	-	1 1 1 1	2 1 <u>a</u> / 1 <u>a</u> / 2 2	1 1 1 1	1 1 1 1	2 5 <u>b</u> / 5 <u>b</u> / 5 <u>b</u> /
Regional Advisers provided from project funds:	1967 1968 1969* 1970* 1971*	3 3 3 3					

<sup>\*</sup> Proposed.

<sup>1/</sup> The staff requirements for the direction of the Division are included under "Social Development".

a/ One of these staff members is allotted to the Lusaka sub-regional office.

 $<sup>\</sup>underline{b}$ / Includes one UNA volunteer.

#### A. Social Development

The pace of agricultural and industrial development in the region is seriously hampered, not so much by scarcity of capital and natural resources as by the forces of African social tradition, coupled with a complex of rigid human factors. Rigid property structures and land tenure systems, in certain cases, are rendering futile the efforts of Governments to achieve more equitable distribution of income. Inflexible customs and philosophies of traditional life continue to act as a brake on the introduction and acceptance of social change and modernization.

Most of the transformation which has so far taken place in the social structure has been due more to the sheer force of contemporary political, economic and demographic factors than to deliberate action. Increased physical and social mobility have tended to uproot the individual from the settings of the traditional family and home community. New factors of social stratification have super-imposed themselves upon the traditional ones, on the basis of western-type education, occupation, personal wealth and political status. There is thus an emergence of new forms of wealth, power and social standing, which provide new criteria for competition and social value. They also provide a new basis for social conflict between the traditional and modern elements in the society. A conservatism of the rural sector contrasts with the active and new economic interests of the fast rising cities.

Advanced mechanization and technological processes have been introduced in parts of the region. Vast hydro-electric schemes and irrigation dams are being introduced into areas of tradition-bound peasants.

The nature of social development programmes sponsored by African Governments has tended to reflect more the differences in the structure, traditions, values and concepts of the metropolitan powers than those of the indigenous African communities. They have also tended to emphasize the remedial aspects - dealing mainly with social casualties - rather than facilitate the adjustment process of the African community to the forces of change.

Out of every ten children born in Africa, between 3 and 5 die in infancy; 40 per cent do not live to adulthood. Communicable diseases - including tuberculosis, leprosy, small-pox, yellow fever, bilharziasis and onchocerciasis - remain a major concern.

Educational systems are producing school-leavers without jobs.

Unemployed idle youth - youth with hopes aroused by national independence and the promise of a new life, but whose illusions are shattered by the lack of any movement towards the fulfilment of these hopes - represents perhaps the greatest of all threats to the new regimes of independent African States.

For the next five years, the programme will focus on: problems of social change, social problems of urbanization, human and institutional factors which affect the process of industrialization; socioeconomic problems encountered by African Governments in rural development; social prerequisites to agricultural development and promotion of industry; and priority social service programmes needed by African Governments, in order to raise the level of Tiving of rural and urban manpower.

#### PROJECTS

#### 42. Study of the Social Aspects of Industrialization

This project is designed to assist Governments in anticipating and coping successfully with social factors which affect industrialization, including social prerequisites, obstacles, social consequences and concomitants and essential social services, needed to facilitate industrial progress.

Close collaboration will be maintained, in its implementation, with other ECA Divisions and Sections, particularly the Industry and Housing Division; the United Nations Social Development Division; ILO; WHO; UNESCO; UNICEF and social research institutes in the region.

The following specific sub-projects will be undertaken in the quinquennium:

(a) Study of Selected African Industrial Centres in which
Agglomerations have occurred as a result of Industrialization

This study will be inter-disciplinary and will focus on:
the peculiar patterns of agglomeration; demographic characteristics of the traditional and modern sectors and of the labour
force; social and institutional change and their effect on the
industrial process; social inducements, to resist
(attitudes, ideologies, etc.) and consequences of industrial
promotion activities; migration and urbanization patterns,
problems of housing (including those created by the existence
of shanty towns around industrial zones), health, nutrition
and social welfare; and analysis of measures to cope with
them.

(i) Monograph on Patterns of African Industrial
Settlements (1969)

Past and current publications, reports and surveys on different patterns of industrial settlements, on a country and sub-regional basis will be collected and studied and a monograph will be prepared on patterns of African industrial settlements based on (a) agricultural processing, (b) manufacturing, (c) mining and (d) other types of industry. Particular industrial settlements will then be selected for comparative study in depth.

(ii) Monograph on Stlected African Industrial Centres in which Agglomerations have occurred as a result of Mining and Agricultural Processing (1970)

A detailed study will be undertaken, on a comparative basis, of selected African industrial centres in which agglomerations have occurred as a result of 

- (a) mining and (b) agricultural processing. The study will cover demographic characteristics of the traditional and modern sectors of the labour force; social and institutional changes and their effect on the industrial process, etc., and will result in a monograph.
- (iii) Monograph on Selected African Industrial Centres in which Agglomerations have occurred as a result of Manufacturing and other Types of Industry (1971)

A detailed study will be undertaken, on a comparative basis, of selected African industrial centres in
which agglomerations have occurred as a result of
manufacturing and other types of industry. This study
will cover demographic characteristics of the traditional and modern sectors of the labour force;
social and institutional changes and their effect
on industrial processes, etc., and will result in
a monograph.

(iv) Paper on Social and Institutional Problems of
Industrialization (1972)

The monographs prepared in the three previous phases of this sub-project will be brought together and analysed and a comprehensive paper will be prepared on the social and institutional problems of industrialization and methods for coping with them. This paper will serve as a basic document for the regional seminar on social aspects of industrialization planned for 1972.

Interested specialized agencies and other organizations will be invited to cooperate in their sub-projects as appropriate.

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# (b) Study of Social Problems Encountered by Selected Governments in connexion with River Basin Development Schemes (1970)

A comparative on-the-spot study and evaluation will be undertaken of social problems encountered by the Sudan, Ghana and the UAR in connexion with the Wadi Halfa, the Volta River and the Aswan River basin development schemes.

The emphasis will be on comparative methods and organizational patterns adopted; essential social pre-conditions fulfilled; problems of resettlement of displaced populations encountered; and measures undertaken by the respective Governments with respect to problems in the social field, including administrative organization. It will include a study of the social structure in order to determine the organization and traditional systems and values which strengthen or weaken the objectives of the schemes.

This study should provide essential experience for similar river basim development projects being planned in the region. The final report will be utilized in other sub-projects and will also serve as a background paper for the regional seminar on social aspects of industrialization planned for 1972.

## (c) Regional Siminar on the Social Aspects of Industrialization (1972)

This seminar will bring together senior country representatives from the industrial, social and planning fields. Topics will include: Industrial Development Policy in relation to Social Development; Priorities of Social Services in Industry; Co-ordination of Social Planning with Industrial Development Planning.

Assistance will be requested from UNDP or OTC, through the regional programme of technical assistance. ILO, UNIDO, DSD, FAO, WHO and UNESCO will be invited to participate and other ECA Divisions and Sections, particularly the Industry and Housing Division, will assist the Social Development Section in the running of this seminar.

## 43. The Development of Rural Life and Institutions

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This project is designed to stimulate action by African Governments to develop rural life and institutions including: agrarian structures; rural resettlement and land reform measures; rural water supplies; credit facilities for production; small—and medium—scale industries, access to market centres; communication; nutrition and health extension; mobilization of rural manpower; education and training; organization and administration of rural development programmes; co-operatives and marketing systems and other rural institutions likely to strengthen the income resources of rural families.

In addition to measures which will be undertaken as indicated under continuing tasks, the following specific projects will be undertaken in the quinquennium:

### (a) Seminars on the Development of Rural Life and Institutions

In order to secure the fullest co-operation between African Governments; to exchange ideas and information on an integrated approach and to identify, for each sub-region, a number of suitable pilot projects which - subject to the agreement of the Governments concerned - could be sponsored for inter-agency co-ordinated assistance, the following sub-regional seminars will be held:

- (i) Central African Seminar on the Development of Rural Dife and Institutions (1969)
- (ii) West African Seminar on the Development of Rural Life and Institutions (1970)
- (iii) East African Seminar on the Development of Rural Life and Institutions (1971)
- (iv) North African Seminar on the Development of Rural Life and Institutions (1972)
- (v) Regional Seminar on the Development of Rural Life and Institutions (1973)

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Assistance will be requested from UNDP or OTC, through
the regional programme of technical assistance. The United
Nations Social Development Division, ILO, WHO, UNESCO and
UNICEF will be asked to co-operate. Other ECA Divisions and
Sections will assist the Social Development Section in
running these seminars.

## (b) Sub-regional Training Course on Rural Extension and Community Development (West Africa : 1969)

This project, like the one implemented for East Africa in 1968 is designed as an intensive refresher course in the objectives, methods and techniques of rural extension and community development, for senior government officials engaged in the administration or implementation of rural extension and community development programmes on a national or regional basis.

It will concentrate on objectives in rural development (in the West African sub-region) and methods by which community development and rural extension approaches can be integrated and utilized to achieve these objectives. Participants will be drawn not only from the community development field, but also from the rural extension fields of agriculture, health and nutrition, education and local government.

Assistance will be requested from UNDP or OTC, through the regional programme of technical assistance. FAO, UNESCO, ILO and WHO will be asked to co-operate. Other ECA Divisions and Sections will assist the Social Development Section in running this course.

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# (c) Workshop on the Role of Local Government Authorities in the Development of Rural Life and Institutions (1973)

In the past, various courses and regional meetings have been sponsored by the secretariat (Public Administration Section) in order to orient local government training and programmes to meet local economic and social change. There is an obvious need for greater participation of rural people in local development projects.

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This workshop is intended to provide an opportunity for both local authority officials and rural development agents (including community development workers, as well as health, nutrition, agricultural and education extension workers) to exchange experiences and explore possibilities of achieving practical and effective working relations between central, local and voluntary organizations, in the stimulation, organization, planning execution and supervision of integrated rural development projects.

Assistance will be requested from UNDP or OTC, through the regional programme of technical assistance. The Inter-Agency Committee on Rural Development will be asked to provide technical support. Other ECA Divisions and Sections, particularly the Public Administration Section, will assist the Social Development Section in running this workshop.

### 44. Enlisting Popular Participation in Development

Already operating, in all African States, are various experiments, policies and measures - including community development, animation rurale, co-operatives and other forms of mutual aid associations - which aim at enlisting and channelling popular support for local and national development and securing fuller participation of broad social groups (e.g., youth and women) in such processes. Furthermore, the inter-disciplinary country studies of socio-economic problems in the development and improvement of rural life and institutions, (which have been conducted in various African

countries since 1964) have already accumulated a wealth of data on methods and problems which can be utilized for objective comparative analysis of effectiveness of the various experiments.

The following specific sub-project will be undertaken in the quinquennium:

(a) Study of Policies and Measures for Securing Popular
Participation in National Development (1970)

This study, which will be conducted on a comparative basis, will include a critical appraisal of policies and measures adopted by individual African States (and elsewhere) for enlisting people's participation in local and national development; problems of organization, incentives and change of attitudes; social and education; inter-disciplinary co-operation; and assessment of effectiveness of measures.

The study will be based on material available from country reports of United Nations Technical Assistance experts, ECA mission reports and publications issued by Governments and United Nations agencies.

Interested specialized agencies and other organizations will be invited to participate.

#### - "CONTINUING TASKS

The following continuing tasks will be undertaken during the quinquennium:

- (a) providing advisory services and undertaking advisory missions to Member Countries, on request, on social development questions;
- (b) preparing, as required, revising and re-issuing studies, documents and papers not linked with specific projects and sub-projects such as monographs, brochures, handbooks and manuals on various aspects of social development. In particular the following will be undertaken:
  - (i) In collaboration with the Inter-agency Committee on Rural Development, country surveys in general and specific

socio-economic problems in the development of rural

- (ii) Study and analysis of social problems encountered by African States in cities and localities undergoing rapid urbanization;
- (iii) Case studies of patterns and priorities in national social welfare programmes, their planning, organization administration, financing, co-ordination, and their integration with overall development;
  - (iv) Comparative studies in national policies and programmes on youth their out-of-school preparation and activities for participation in local and national development; inter-agency co-operation at regional and national levels.
  - (c) co-operating, as necessary, in implementing the programmes of other divisions and sections of ECA and the African programmes of United Nations Headquarters, Specialized and Operating Agencies of the United Nations, IDEP and similar organizations. In particular, co-operating with the Danish Board of Technical Co-operation in arranging and running community development group fellowship training courses; special short courses of three months duration are envisaged for senior or supervisory level African officers;
  - (d) assisting schools of social work in Africa by facilitating the production of indigenous teaching materials (text books, case studies, audio-visual aids, etc.) for social work training including in-service training, in Africa. A standing expert working committee has been appointed, made up of directors of selected schools of social work in the region. In 1970, two professors of social work will be attached to two sub-regional social work training schools in East and West Africa to collect material and to assist training establishments with selection

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of text books. In 1972 it is hoped to arrange a workshop for the standing expert committee to discuss and review materials collected and approve them for publication;

(e) following up former projects, sub-projects and visits by correspondence, elaboration of reports and recommendations, etc.

In the course of the quinquennium, it is expected that further specific projects and sub-projects may arise from the above sub-projects and continuing tasks.

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#### VIII. HUMAN RESOURCES DEVELOPMENT

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#### B. Manpower and Training

Responsibility: HUMAN RESOURCES DEVELOPMENT DIVISION Manpower and Training Section

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## STAFF RESOURCES

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#### B. Manpower and training

Inadequate executive personnel, particularly the shortage of high—and middle—level professional, managerial, technical and teaching personnel, has continued to handicap the implementation of planned development programmes. Local training facilities have been unable to provide adequate opportunities for training in many fields critical to development needs. Most African countries have not as yet been able to develop and adequately man appropriate national machinery for identifying manpower and training requirements, programming the training of nationals to meet these requirements and for formulating suitable programmes for the more effective utilization of available human resources.

The foregoing problems are real constraints on development efforts; their elimination is an essential precondition for the achievement of accelerated social and economic development in the region. To this end activities will be intensified in the field of manpower and training and activities will be directed towards encouraging, advising and assisting member States to develop and mobilize their manpower resources for the realization of their development goals.

Greater attention will be devoted to the identification and evaluation of the major elements in Africa's manpower and training bottle-necks and to ways of eliminating them. Sustained efforts will be devoted to work concerned with the identification and assessment of manpower and training requirements for sub-regional industrialization and agricultural modernization programmes, the relation of educational programmes to manpower and overall development needs, the training of Africans in critical areas of development, the establishment and development of national machinery for manpower planning and collaboration with the specialized agencies and other interested organizations having training programmes in Africa, with a view to achieving concerted action and better coordination of programmes designed to promote Africa's human resources development and utilization.

#### PROJECTS

### 45. Manpower Planning and the Determination of Training Needs

(a) Evaluation Survey of University Enrolment and Manpower
Output (1969)

An evaluation survey of university enrolment and "output mix" in selected African countries will be initiated in 1969. The survey is designed to evaluate the output of university graduates, the potential surplus output of arts, law and social science graduates in particular and in relation to the employment possibilities in the survey countries, and to propose some feasible measures for the deployment and training of these graduates to meet critical manpower requirements. Account will be taken of future manpower requirements by levels and types as well as requirements for sub-regional development project proposals. The survey will provide an informed basis for African Governments and university authorities to reappraise the allocation of higher educational resources in relation to the end products of educational investments and the requirements for economic development, and to encourage necessary adjustments.

The survey will be undertaken in collaboration with the International Institute of Educational Planning, Paris, UNESCO, African universities and other interested organizations.

(b) Seminar on the Planning of the Educational Sector (1969)

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A seminar on the planning of the educational sector will be organized in 1969, to consider approaches, problems and experiences in the field of educational planning. The report of the seminar will be made available to educational and planning authorities in member States.

This seminar will be undertaken in collaboration with the Danish Government and UNESCO. The Manpower and Training Section will be assisted by the Research and Statistics Division of ECA in running this seminar.

#### (c) Meetings of the ECA Working Party on Manpower and Training

Meetings of the ECA Working Party on Manpower and Training are designed to give manpower planning and training experts from the participating African countries an opportunity to review, appraise and make recommendations on ECA's work programme in the field of manpower and training and to exchange views on country experience in finding solutions to particular manpower and training problems.

The ILO, UNESCO and other specialized agencies, the OAU and other organizations as well as the substantive Divisions of the ECA secretariat are invited to participate in the deliberations of the Working Party. Reports on the deliberations and the recommendations of the Working Party are presented to the sessions of the Commission for consideration.

Meetings will be arranged as follows:

- (i) Third Meeting of the ECA Working Party on Manpower and Training (1970)
- (ii) Fourth Meeting of the ECA Working Party on Manpower and Training (1972)

### (d) Regional Seminar on Education for Development in Africa (1970)

A regional seminar on education for development in Africa with particular reference to African and world economic perspectives over the next two decades will be organized in 1970. The seminar will be the main regional contribution to the United Nations programme for the observation of 1970 as the International Education Year. It is intended to supplement the seminar

with organized radio talks. The seminar will issue a report on its deliberations and make recommendations which will be made available to member States and educational authorities for their consideration.

This seminar will be run in collaboration with UNESCO.

(e) Evaluation of Enrolment and Output of Primary and Secondary Schools (1970/71)

Evaluation studies on the enrolment and output of school leavers at the first and second levels in selected African countries will be undertaken during 1970-1971. The studies will pay particular attention to wastage in the school system and the relevance and adequacy of output to the economic situation and programmes of the countries studied. It is envisaged that monographs on these studies will emphasize the need to plan for more employment opportunities for school leavers and to adjust school curricula towards the requirements of technical and vocational skills in agriculture, industry and the services.

### 46. Techniques and Methodology of Manpower Planning and Training

(a) Training Courses in the Techniques and Methodology of
Manpower Planning and Training Programming

Training courses in the techniques and methodology of manpower planning and training programming will be organized for African officials with responsibility for manpower and educational planning and for the co-ordination of national training programmes. These courses, which will be organized for separate language groups for better effectiveness of results, are aimed at assisting member States to develop corps of indigenous manpower planners for taking appropriate manpower planning action on a continuing basis.

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Courses will be organized as follows:

- (i) Training Course in the Techniques and Methodology of
  Manpower Planning and Training Programming
  (French language: 1969)
- (ii) Training Course in the Techniques and Methodology of

  Manpower Planning and Training Programming

  (English language: 1970)
- (iii) Training Course in the Techniques and Methodology of

  Manpower Planning and Training Programming

  (French language: 1971)

These courses will be organized in collaboration with IDEP and with the assistance of ILO, UNESCO and other organizations. Assistance will be requested from UNDP, through the regional programme of technical assistance.

- (iv) Orientation Course in Human Resources Planning for Top-Level Officials (1969)
- (v) Orientation Course in Human Resources Planning for Top-Level Officials (1971)
- (vi) Orientation Course in Human Resources Planning for Top-Level Officials (1973)

These courses will be organized in collaboration with USAID.

(b) Study Tours on Manpower Planning and Training Programming

Study tours on manpower planning and training programming in Africa will be organized for African countries participating in the ECA Working Party on Manpower and Training. The study programmes will be designed to acquaint the participants with the approach, techniques, organizations and problems of human resources planning in African countries at various levels of development. Participants will discuss their findings and

prepare individual reports and suggestions for the application of experience gained to manpower planning in their home countries.

The study tours will be undertaken as follows:

- (i) Study Tour on Manpower Planning and Training
  Programming (English language: 1969)
- (ii) Study Tour on Manpower Planning and Training
  Programming (French language: 1970)

Assistance will be requested from UNDP, through the regional programme of technical assistance.

(c) Workshops on Modern Training Methods and Teaching Aids

Workshops on modern training methods, teaching aids and training programming and evaluation will be organized for Directors and Assistant Directors of Training Institutes as well as for senior trainers from public and private training centres. These workshops will pay particular attention to the use, adaptation and preparation of teaching materials and the designing of training programmes by types and levels of training. The workshops will be held as follows:

- (i) Trainers' Workshop (English: 1969)
- (ii) Trainers' Workshop (French: 1970)
- (iii) Trainers' Workshop (English and French: 1971)
  - (iv) Mobile Trainers' Workshop (English: 1972)
    - (v) Mobile Trainers' Workshop (French: 1973)

Assistance will be requested from UNDP through the regional programme of technical assistance and from UNESCO. ILO and bilateral sources for the organization of the workshops. Other interested specialized agencies and organizations will be invited to participate.

(d) Seminar on the Role of Employers and Trade Unions in Training (1971)

A seminar on the role of private employers and of workers' unions in the training and preparation of workers will be organized in 1971. It is intended to invite representatives of the two groups as well as of the public sector to participate in the seminar. The aim of the seminar is to promote a mutual understanding of their complementary training functions, to emphasize co-ordinated planning and the need for more self-help efforts among employers and employees' unions in the training of workers, particularly through co-operative programmes. It is envisaged that representatives will report back to their organizations and that the report of the seminar will be made available to member States.

This seminar will be organized in collaboration with ILO and other interested organizations. Assistance will be requested from UNDP, through the regional programme of technical assistance.

#### CONTINUING TASKS

The following continuing tasks will be undertaken during the quinquennium:

(a) providing advisory services and undertaking advisory missions to Member Countries, on request, on manpower and training questions, including the development of national manpower planning machinery and training programmes; in conjunction with other interested organizations, to assist with manpower surveys, evaluation of manpower and training programmes and give advice on methodology and administrative arrangements;

- (b) preparing, as required, revising and re-issuing manpower and training studies, documents and papers not linked with specific projects and sub-projects, including studies on assessment of trained personnel requirements for sub-regional development projects; studies on the reorientation of educational efforts to meet economic and social development goals; establishment and maintenance of rosters of African specialists, including African students and trainees undergoing specialized training abroad; issue of the Quarterly Training Information Notice;
- co-operating, as necessary, in implementing the programmes of other divisions and sections of ECA and the African programmes of Specialized and Operating Agencies of the United Nations and bilateral donors of technical assistance including: co-ordination of in-service training for African officials in the United Nations Family of Organizations; helping to meet the needs of regional and sub-regional institutions for training and research; collaboration in seminars and training courses and co-ordination of the sectoral training activities organized by the various divisions and sections of ECA;
- (d) co-ordinating of offers of bilateral scholarships and fellowships and initiating an African Scholarship and Fellowship Programme for training to meet the requirements of specialized manpower;
- (e) following up former projects, sub-projects and visits by correspondence, elaboration of reports and recommendations, etc. In particular, the training courses in the techniques and methodology of manpower planning and training will be followed up by country visits to ascertain the deployment of course participants for manpower planning functions in their home countries and to provide on-the-spot advice on ways to resolve planning difficulties; the course materials will be used in

preparing a series of monographs on human resources planning in Africa - these monographs and trainees' handbooks on specific individual and syndicate work projects will provide further literature and operational manuals for the guidance of African manpower planners.

(f) in response to country requests action will be taken during the quinquennium to assist with the promotion of sub-regional centres for the organization of national and multinational trainers' workshops and manpower planning courses as well as for research on manpower and training problems, preparation of materials for programmed instructions and the preparation of "teaching kits" for trainers. This action will be taken in close co-operation with higher educational institutions in countries requesting to play host and with assistance from ILO, UNESCO and bilateral sources. It is envisaged that African countries that have so far indicated interest in the proposed centres will subsequently make formal requests for Special Fund assistance.

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#### VIII. HUMAN RESOURCES DEVELOPMENT

#### C. Public Administration

Responsibility: HUMAN RESOURCES DEVELOPMENT DIVISION Public Administration Section

#### STAFF RESOURCES

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- \* Proposed.
- 1/ The staff requirements for the direction of the Divison are included under "Social Development".

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- Mr. van der Wielen, Associate Expert, has been considered as a professional staff member for the purposes of man-month calculations. His period of assignment will end on 12.5.1969.
- b/ One of the Regional Advisers is supplied by UPU in connexion with the Study of Postal Facilities in Africa.
- c/ Includes one GS provided by technical assistance funds.
- d/ It is hoped that, in addition, one Regional Adviser will be supplied by UPU in connexion with the Study of Postal Facilities in Africa; if so, all his time will be devoted to this task.

#### C. Public Administration

An adequate level of administrative competence must be regarded as a prerequisite to planning and development as well as to orderly and effective government. While emphasis is given to projects and tasks designed to assist in achieving the main objectives of the Commission, viz. agricultural development and industrialization, any of the efforts in the field of public administration must be directed, as in the past, to the improvement of administrative potential in general, as part of the infrastructure necessary for effective planning and, in particular, plan implementation.

The difficulties of African administration are of several kinds:

- scarcity of middle-grade administrators; insufficient training of certain senior civil servants for their responsibilities; lack of young university graduates, specialists and technicians in the public service;
- inadequacy of the structures and procedures of the central administrative organs for the tasks of preparing, supervising and carrying out development programmes; the problem here is one of reform, organization and management;
- in French-speaking countries, the absence of local administrative institutions adequate to ensure the participation of the rural population in the carrying out of plans or the failure of experiments tried; in the English-speaking countries, the failure to adapt the system of local government to this same objective. The reforms needed in this area relate to the elaboration of a new administrative strategy at the local level, which in turn would lead to the establishment of new institutions.

In general, the solution to these broad categories of problems should be looked for in a rational framework of "ends and means" which would result in African administration being adapted to the needs of development. "Administration for Development" is therefore the general

theme which will dominate work in this area in the quinquennium.

#### PROJECTS

#### 47. Development Administration

All aspects of administration need to be developed, reorganized as necessary and strengthened to meet the needs of development and in particular the modernization of agriculture and industrialization. Efforts in this direction have been made in the past by the holding of seminars, courses and meetings as well as the preparation of manuals and reports in the field of administrative improvement, personnel administration and training. The following action will be undertaken in this field during the quinquennium:-

#### (a) Government Purchasing and Supply

The efficiency and effectiveness of Government purchasing and supply systems and procedures has a direct effect on the cost and timely completion of development projects, as well as on the recurring costs of the public service.

### (i) Training Course on Government Purchasing and Supply (1969)

This regional training course which will be held concurrently in English and French, will be based on information collected as a result of previous studies and assistance given to Governments.

Assistance will be requested from UNDP or OTC through the regional programme of technical assistance, and from bilateral donors in the form of consultants.

### (ii) Manual on Government Purchasing and Supply (1970)

A manual will be prepared, taking into account the documents and discussions of the training course to be held in 1969. This manual will be made available to Schools and Institutes of Public Administration as well as to the substantive Ministries and departments of Government in African countries.

## (b) Administrative Reform for Development . . . . . . f. is in the arms.

Administrative reform needs to be planned in order that the organs of government shall be adapted and prepared for the evolving development tasks, as well as reshaped to undertake their existing work more efficiently and effectively.

The Public Administration Division of the United Nations in New York in 1967 prepared a questionnaire on the prerequisite conditions for administrative reform. The Public Administration Section of ECA assisted in the preparation of the questionnaire and made visits to two African countries in 1968 on this subject.

# (i) Seminar on the Prerequisite Condition for Administrative (1969)

This regional seminar, which will be held concurrently in English and French, will follow up the work that has already been done.

Assistance will be requested from UNDP or OTC through the regional programme of technical assistance and from bilateral donors in the form of consultants.

## (ii) Seminar on Organizational Weeds for Administrative Reform (1971)

This regional seminar, which will be held concurrently in English and French, will complement the seminar on the prerequisite conditions for administrative reform due to be held in 1969.

Assistance will be requested from UNDP or OTC, through the regional programme of technical assistance, and from bilateral donors in the form of consultants.

#### (c) The General Administrative Framework for Development

It is necessary to study the administration for development, to establish the principles which will enable the various elements comprising the administration to direct their efforts towards a single common goal.

## (i) Seminar on the Administrative Framework for Development (1970)

A regional seminar will be held concurrently in English and French to discuss the administrative framework for development, to agree on the organizational principles and procedures most appropriate to the stages of development of the countries of Africa and to focus attention on the administrative obstacles to development.

Assistance will be requested from UNDP or OTC, through the regional programme of technical assistance, and from bilateral donors in the form of consultants.

## (ii) Brochure on the Administrative Obstacles to Development (1971)

Arising out of the documents and discussions of the Seminar held in 1970, a brochure on the administrative obstacles to development will be prepared in 1971 and made available to Schools and Institutes of Public Administration as well as to the substantive Ministries and departments of Government in African countries.

## (d) Orientation Seminar on Administrative Training for Professional and Technical Civil Servants (1971)

As development proceeds, more and more senior technical and professional civil servants are required to take administrative responsibility for the control, direction, organization and supervision of specialized departments of Government. These civil servants, whatever may be their professional and technical

competence, have not been trained for their administrative tasks. This regional seminar, which will be held concurrently in English and French, is designed to orient those responsible for their supervision, control and training to the organization, procedures, methods and programmes appropriate for the administrative development of these professional and technical civil servants.

Assistance will be requested from UNDP or OTC, through the regional programme of technical assistance, and from the ILO and bilateral donors in the form of consultants.

(e) The Administrative needs for Information Collection, Retrieval and Dissemination

Information is taking an ever increasing place in the effective functioning of the administration, particularly in relation to development planning and implementation. The administrative organization of information leaves much to be desired, in many African countries, in the areas of collection, retrieval and dissemination.

(i) Seminar on the Administrative Needs for Information
Collection, Retrieval and Dissemination (1972)

This seminar, which will be held concurrently in English and French, will consider the problems and suggest solutions in this field.

Assistance will be requested from UNDP or OTC, through the regional programme of technical assistance, and from bilateral donors in the form of consultants.

(ii) Brochure on the Administrative Needs for Information Collection, Retrieval and Dissemination (1972)

Arising out of the documents and discussions of the Seminar to be held earlier in the year, a brochure will be prepared and made available to Schools and Institutes of Public Administration as well as to the substantive

Ministries and departments of Government in African countries.

## (f) Seminar on Administrative, Financial and Technical Measures to ensure the Effective Use of External Aid (1973)

While the majority of the efforts required for development must come from within the developing countries, external aid is often necessary to stimulate and accelerate progress in certain fields. The effective use of such aid depends largely on the administrative, financial and technical measures taken to control and direct it. Most African Governments have already established organizations to receive, co-ordinate and maximize the effectiveness of external aid. However, improvements can be made to the functioning of these structures, which must also be adapted to the new forms which external aid will probably take in the future. This regional seminar, which will be undertaken concurrently in English and French, will consider the administrative, financial and technical measures needed to ensure effective use of external aid.

Assistance will be requested from UNDP or OTC, through the regional programme of technical assistance, and from bilateral donors in the form of consultants.

### 48. The Administration of Public Enterprises

More than 50 per cent of the increment of capital investment foreseen in the current development plans of most African countries is destined
to be utilized in the public sector, mainly through public corporations.

Many of these corporations operate in the fields of agriculture and
industry. It is therefore highly important to development that public
enterprise should be well organized, efficient and competently managed.

An inter-regional seminar on the Organization and Administration of Public Enterprises was arranged by the Public Administration Division, New York in September 1966. This was followed by a seminar on broad aspects and problems of the management of public enterprises in Africa,

arranged by the Commission in September 1968. The following related seminars and studies will be undertaken in the quinquennium;

(a) Regional Seminar on the Role of Public Enterprises in Planning and Plan Implementation (1969)

This seminar will be run concurrently in English and French.

Assistance will be requested from UNDP or OTC, through the regional programme of technical assistance. UNIDO and ILO will be asked to provide consultants. Other ECA divisions and sections will assist the Public Administration Section in running this seminar.

(b) <u>Sub-Regional Seminars on Personnel Administration and Training</u> in Public Corporations

These seminars, which will be run in English or French as required, will be itinerant and will be undertaken, by agreement with the Governments concerned, in four or five countries in each sub-region. The countries will be selected as a result of interest shown at the regional seminars and the state of development and complexity of public corporations revealed in country papers and discussions. The seminars will be undertaken as follows:

- (i) Central African Seminars on Personnel Administration and Training in Public Corporations (1970).
- (ii) West African Seminars on Personnel Administration and Training in Public Corporations (1971).
- (iii) East African Seminars on Personnel Administration and Training in Public Corporations (1972).
- (iv) North African Seminars on Personnel Administration and Training in Public Corporations (1973).

Assistance will be requested from UNDP or OTC, through the regional programme of technical assistance.

It is hoped that from 1974 onwards, national Schools and Institutes of Public Administration will continue this training.

## (c) Manual on the Administrative Problems of Public Enterprises (1973)

Arising from the experience obtained in the seminars, a manual on the administrative problems of pullic enterprises will be prepared in 1973.

### 49. The Recrientation and Improvement of Local Administration

The large percentage of the populations of African countries which lives in rural areas, and the traditional life and customs of these populations which makes them resistant to change and development, makes all central Government efforts towards progress very uncertain of success, unless changes of mental attitudes can be achieved. In the absence of economic mechanisms capable of inducing such changes, the administration, as the instrument of the Government, must adapt its methods and procedures in such a way as to make development projects intelligible and acceptable to rural populations. One of the requirements for agricultural and rural development is, therefore, the reorientation and improvement of local administration.

The following action will be undertaken in this field during the quinquennium:

## (a) Seminar on the Structure of Local Administration (1970)

The British system of local government, as established in English-speaking African countries, is not adapted to local development. On the other hand, French-speaking African countries realize that the almost complete lack of local administrative structures impedes the implementation of plans. A regional seminar, concurrently in English and French, on the

#### CONTINUING TASKS

The following continuing tasks will be undertaken during the quinquennium:

- (a) providing advisory services and undertaking advisory missions to Member Countries, on request, on administrative improvement, organization, personnel administration, training, development administration, decentralized administration and other public administration questions;
- (b) giving assistance to and maintaining liaison with Schools and Institutes of Public Administration, Universities and other public administration institutions and organizations; in particular, arranging, in co-operation with the International Institute of Administrative Sciences and CAFRAD, biennial regional meetings of representatives of Schools and Institutes of Public Administration and, in the intervening years, subregional meetings and encouraging co-operation between the various Schools and Institutes by means of exchange of course material and documentation, lecturers and students;
- (c) preparing, as required, revising and re-issuing studies, documents and papers not linked with specific projects and sub-projects, such as brochures, handbooks and manuals on various aspects of public administration;
- (d) co-operating, as necessary, in implementing the programmes of other divisions and sections of ECA and the African programmes of United Nations Headquarters and Specialized and Operating Agencies of the United Nations, the International Institute of Administrative Sciences, the International Union of boost Authorities, IDEP and similar organizations;
- (e) following up former projects, sub-projects and visits by correspondence, elaboration of reports and recommendations, etc.;

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(f) Since the beginning of 1967, an expert in postal administration has been made available by UPU to the Commission to study methods of improving postal communications between African countries and with other continents. He has begun by studying air mail connexions and his studies, undertaken from documents and by visits to African countries, have already resulted in concrete proposals for partial improvement. It is hoped that an African Postal Conference will be arranged in 1969 as a follow-up to this work, when the formation of an African Postal Union will be discussed. Assistance will be given in the organization and follow-up of this conference.

## IX. POPULATION PROGRAMMES

Responsibility: RESEARCH AND STATISTICS DIVISION Demography and Social Statistics Section

## STAFF RESOURCES

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<sup>\*</sup> Proposed.

<sup>1/</sup> The staff requirements for the direction of the Division are included under "Statistical Services".

### IX. POPULATION PROGRAMMES

In connexion with population projects, mention should be made of the activities on population analysis, divorced as far as possible from statistical data, methods and studies on population which come under statistical programmes.

During the five-year period, most of the censuses and demographic surveys for 1970 will have been completed, and it will then be possible to:

- get an up-to-date picture of the demographic position in Africa;
- draw the necessary conclusions for the countries in the region;
- = study the influence of the various factors on demographic changes in the African countries;
- undertake studies which will help in the preparation and planning of economic and social development policies in Africa.

#### PROJECTS

#### 50. Demographic Development

This project entails:

- examining, in conjunction with the countries concerned, the progress achieved and the problems met with in carrying out studies on population;
- studying, in conjunction with the countries concerned, their requirements under technical assistance and, at their request, providing them with such assistance through regional advisers, in co-operation with the Population Division and the Bureau of Technical Assistance Operations at United Nations Headquarters;
- preparing documentation and servicing the African Population Conference.

The following meetings will be held during the quinquennium:

- (a) Meeting of the Preparatory Committee for the African

  Conference on Population (1969)
- (b) Meeting of the Preparatory Committee for the African Conference on Population (1970)
- (c) African Conference on Population (1971)

Other ECA divisions and sections will assist the Research and Statistics Division in implementing this project. Interested specialized agencies and other organizations will be invited to participate in the Conference.

## 51. Establishment of Demographic Norms for Africa

This project is concerned with the undertaking of research on demographic methods and the preparation of documents on methodology to be used at seminars and working groups organized for the exchange of ideas on ways and means of making demographic data easier to compare, regionally and internationally, and adapting international norms to Africa.

The following activities will be undertaken during the quinquennium:

- (a) Seminar on Application of Demographic Data and Analysis in Development Planning (1969)
- (b) Seminar on Demographic Data Required for Planning and Evaluation of Population Programmes (1970)
- (c) Seminar on Statistics and Studies on Migration and Urbanization (1970)
- (d) Study on Administrative Population Census Data (1971)
- (e) Expert Group on Techniques of Evaluation of Basic

  Demographic Data (1971)
- (f) Study of Implementation and Evaluation of Population
  Policy Programmes (1972)
- (g) Study of the Demographic Aspects of Manpower Planning (1973)

Assistance will be requested from UNDP, through the regional programme of technical assistance, in running sub-projects (c) and (e) above. The co-operation of the Population Division of United Nations Headquarters and other interested organizations will be requested as appropriate. Other ECA divisions and sections will assist the Research and Statistics Division as appropriate in implementing the sub-projects.

### 52. Demographic Studies

This project is concerned with the analysis of demographic data, the evaluation of demographic indicators and the preparation of population projections for basic studies on the preparation and planning of economic and social policy.

The following studies will be undertaken during the quinquennium:

- (a) Study of Censuses and Vital Statistics Relating to Towns and Cities in Africa (1969)
- (b) Study of Economic and Social Impacts of Urbanization Levels and Trends (1969)
- (c) Study of the Economic and Social Consequences of Migratory
  Labour (1971)
- (d) Study of Age Patterns of Fertility in African Countries and Sub-National Population Groups (1970)
- (e) Study of Levels and Trends of Infant and Early Childhood Mortality (1970)
- (f) Study of Reconciliation of Census and Post Enumeration Check
  Data (1970)
- (g) Study of the Cause of Fertility Differentials in African Countries (1971)
- (h) Study of Inter-relationships between Population Growth,

  Migration and Labour Force Participation (1971)

- (i) Study of Fertility and Mortality Patterns in Nomadio and Sedentary Population and Demographic Implications of Sedentarization (1972)
- (j) Study of Effects of Education on Levels of Fertility, Mortality, Migration and Economic Activity (1973).
- (k) Study of Requirements of Food, Housing, Educational
  Facilities, Health Services in Relation to Prospective
  Population Trends and Economic Growth (1973)
- (1) Study of Results of Recent Censuses and Surveys in Africa and their Implications (1973)
  - (m) Demographic Study of Mon-African Populations (1973)

Other ECA divisions and sections will assist the Research and Statistics Division in implementing the sub-projects. Interested specialized agencies and other organizations will be consulted as necessary.

- 53. Collection, Exchange and Distribution of Information
  This project entails:
  - the collection and analysis of demographic data of the African countries;
  - the preparation and distribution of demographic data for all the countries in the region;
  - the publication of information on demographic activities.

    The following publications will be published during the quinquennium:
  - (a) African Directory of Demographers (1969)

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- (b) Study of Factors Influencing Demographic Change (1970)
- (c) Studies of Demographic Changes and Trends in Africa (1971)

### CONTINUING TASKS

The following continuing tasks will be undertaken during the quinquennium:

- (a) providing advisory services and undertaking advisory missions to Member States, on request, in the field of demography, including giving assistance to governments to enable them to establish training centres in the sub-region, with the help of UNDP;
- (b) giving assistance to and maintaining liaison with demographic centres, universities and other demographic institutions and organizations, including the North African Demographic Research and Training Centre, Cairo, (UAR);
- (c) preparing, as required, revising and re-issuing studies, documents and papers not linked with specific projects and sub-projects;
- (d) co-operating, as necessary, in implementing the programmes of other divisions and sections of ECA and the African Programme of Specialized and Operating Agencies of the United Nations, IDEP and similar organizations;
- (e) following up former projects, sub-projects and visits by correspondence, elaboration of reports and recommendations, etc.;
- (f) evaluating basic demographic data as a means of studying demographic changes and trends in the African countries;
- (g) analysing basic demographic indicators and data for the countries of the sub-region and region;
- (h) studying the requirements of ECA Member States in personnel for demography, and the training and other services that will need to be established to meet those needs.

## X. HOUSING, BUILDING AND PHYSICAL PLANNING

Responsibility: INDUSTRY AND HOUSING DIVISION Housing Section

# STAFF RESOURCES

		<u>D-1</u>	<u>P-5</u>	<u>P-4 a P-</u>	3 <u>P-2/1</u>	GS
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Regional Advisers	1967	3				
provided from project fu		3				·.
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### \* Proposed.

<sup>1/</sup> The staff requirements for the direction of the Division are included under "Industrial Development".

## HOUSING, BUILDING AND PHYSICAL PLANNING

Inadequate housing in both rural and urban areas continues to be one of the main problems facing African countries. This is the result of a complex set of demographic and socio-economic factors, many of which are interdependent and reflect the general level of development.

Population growth in Africa is estimated at 2.4 per cent per annum. Urban population is growing at 5 per cent per annum. The amortization of capital, the interest serviced, the expenditure en maintenance and repairs, and the cost of management, are some of the problems to be solved, in order to maintain and repair dwellings, preserve existing stocks, improve obsolete dwellings, and provide additional houses. The present level of building costs is high. A major component of costs is building materials and components; studies made by the secretariat indicate that materials and components constitute about 50 to 60 per cent of house-building costs. There is little or no development in the building materials industries, where activity in domestic production is for the most part limited to the exploitation of natural resources and to the use of bulk supplies of building materials such as gravel, lime, bricks and a certain amount of timber.

Planning machinery is still weak in most countries. Housing policy is generally not integrated into economic development planning and the allocation of resources is in most cases on an ad hoc basis.

Specific action is, therefore, necessary on the provision of cheaper dwellings, re-examination of financial policy, reduction of costs, and production of adequate raw materials.

The place of housing must be determined as a function of economic development. The objective of policy should be to choose between housing programmes which have the greatest accelerating effect on the provision of satisfactory dwellings in both urban and rural areas.

Since the completion of the studies and surveys that led to the publication <u>Housing in Africa</u>, the secretariat has been in a position to establish priorities and provide advisory services to governments on action - oriented measures. The Programme of Work and Priorities in this sector is, therefore, largely geared to operational activities.

#### PROJECTS

# 54. Policy-Framing and Programming for Housing, Building and Physical Planning

The secretariat will give advice and assistance to governments, on request, on the formulation and implementation of policies and programmes for housing, building and physical planning, the establishment of national housing machinery to implement housing programmes and the functioning of physical planning machinery.

The following specific sub-projects will be undertaken during the quinquennium:

(a) Regional Meeting for Housing Administrators (1970)

This meeting will consider administration in housing at both Ministerial and executing agency level and will make recommendations for the training of housing administrators at all levels.

Government. Other ECA divisions and sections will collaborate with the Housing Section in running this meeting.

- (b) Sub-Regional Training Courses in House Administration
  - (i) East African Training Course in Housing Administration (1971)
  - (ii) Central African Training Course in Housing
    Administration (1971)
  - (iii) West African Training Course in Housing Administration (1972)

# (iv) North African Training Course in Housing Administration (1973)

The content of these training courses will be based on the recommendations of the Regional Meeting for Housing Administrators held in 1970.

Assistance will be requested from OTC, through the regional programme of technical assistance and from bilateral donors in the form of consultants. Other ECA divisions and sections will co-operate with the Housing Section in running these courses.

## (c) Regional Meeting on Physical Planning and Training (1971)

A meeting will be held to consider present and future needs of trained manpower in the field of physical planning at the national, regional and urban levels; to assess present educational and training facilities and to recommend measures to be taken to develop the physical planning staff required.

One of the main objectives of the Meeting will be to consider the establishment of training Centres at the national, sub-regional or regional levels.

This meeting will be arranged jointly with the Centre for Housing, Building and Planning, UN Headquarters. The ECA Manpower and Training Section will collaborate with the Housing Section in running this meeting.

## (d) Preparation of Model By-Laws and Codes of Practics

- (i) Preparation of Model By-Laws for Housing, Building and Physical Planning (1971)
- (ii) Preparation of Codes of Practice for Housing, Building and Physical Planning (1973)

These model by-laws and codes of practice are being prepared on the basis of existing law and practice in African countries.

Bilateral assistance has been requested from the British Building Research Station and the French Centre Scientifique et Technique du Bâtiment, for this project.

# 55. Improving Financing Mechanisms and Increasing Inflow of Capital to Housing

The secretariat will give advice and assistance to governments, on request, on the formulation and implementation of measures to improve and combine more effectively financing mechanisms for housing, and the adoption of new methods for the mobilization of capital.

The following specific sub-projects will be undertaken during the quinquennium:-

- (a) Regional and Sub-Regional Meetings on Housing Finance
  in Africa
  - (i) Regional Meeting on Housing Finance in Africa (1969)
  - (ii) East African Meeting on Housing Finance (1970)
  - (iii) West African Meeting on Housing Finance (1971)
- (iv) North African Meeting on Housing Finance (1972)
  - (v) Central African Meeting on Housing Finance (1973)

These meetings will consider the various sources of financing, both domestic and foreign, and the establishment and consolidation of institutions through which financing can be arranged.

These meetings will be organized where appropriate with bilateral donors, and the African Development Bank will be invited to provide consultants. Other ECA divisions and sections and the Centre for Housing, Building and Planning, UN Headquarters, will collaborate with the Housing Section in running these meetings.

(b) Study on the Mobilization of Domestic and External Sources of Finance for Housing and Community Facilities (1973)

This study will embody the relevant findings of the meetings, to be held between 1969 and 1971, as well as information collected from African Governments. The study will concentrate on practical measures that could be taken by member States.

# 56. Study of the Trends in House-Building Costs

The meeting of Experts on House-Building Costs held in 1968 recommended the establishment of working groups on a sub-regional basis to keep under review trends in house-building costs and measures for cost reduction.

The following specific sub-projects will be undertaken during the quinquennium:

## (a) Meetings of Experts

- (i) North African Meeting of Experts on House-Building Costs (1969)
- (11) West African Meeting of Experts on House-Building
  - (iii) Central African Meeting of Experts on House-Building
    Cots (1971)

These meetings will be held jointly with bilateral donors.

The Centre for Housing, Building and Planning, UN Headquarters,

will collaborate with the Housing Section in running these

meetings.

# (b) Guide for the Building Industry (1969)

A document will be prepared giving the guiding principles to ensure the efficiency of the building team, viz. the client, architect, engineer, quantity surveyor, contractor and others and to lay the ground-work for a progressive building industry.

The guide will be made available to all Member States.

# (c) Training Courses for Supervisory Building Personnel

- (i) Course for Supervisory Building Personnel
  (French-speaking: 1971)
- (ii) Course for Supervisory Building Personnel

  (English-speaking 1972)

These courses can be made the starting point for a progressive drive for Africanization at all levels where trained personnel are most needed. Assistance will be requested from UNDP or OTC through the regional programme of technical assistance. Bilateral donors will be invited to provide consultants.

(d) Manual on Regional Trends in House-Building Costs (1972)

As a follow-up of the Meetings of Experts, the secretariat will compile a manual which will form the basis of advisory services to governments on cost reduction.

57. Stimulating House Production and Improving Existing Dwellings

The following specific sub-projects will be undertaken during the quinquennium:

- (a) Training Courses in Aided Self-Help and Co-operative Housing
  - (i) Central African Course in Aided Self-Help and Co-operative
    Housing (1969)
  - (ii) North African Course in Aided Self-Help and Co-operative
    Housing (1970)

These courses will be similar to those held in East Africa in 1967 and West Africa in 1968.

Assistance will be requested from UNDP or OTC through the regional programme of technical assistance. ILO, WHO and bilateral donors will be invited to provide consultants.

- (b) Training Courses for Building Contractors
  - (i) West African Course for Building Contractors (1969)
  - (ii) Central African Course for Building Contractors (1970)
    - (iii) North African Course for Building Contractors (1971)

These courses will be similar to the one held in East Africa in 1968.

Assistance will be requested from UNDP or OTC through the regional programme of technical assistance. ILO, WHO and bilateral donors will be invited to provide consultants.

## (c) Review of Standard Designs for Low-Cost Housing (1970)

Although standard designs for low-cost housing are technically sound, there are too many designs in use. This impedes speedy production of dwellings and entails a greater measure of supervision during construction. The review will include practical recommendations to governments for the use of a minimum number of standard designs for mass production of dwellings, including site planning and economic layout. The recommended designs will be made available to all Member States.

## (d) Regional Meeting on Rural Housing (1970)

The meeting will consider methods to improve the standar of rural housing, both in design and construction, the provisof water supply and sanitary facilities and the methods of financing (e.g. roof loan schemes).

This meeting will be conducted jointly with the Centre for Housing, Building and Planning, UN Headquarters in conjunction with WHO. Other divisions and sections of ECA will collaborate with the Housing Section in running this meeting.

# (e) Survey of Overcrowded Housing Settlements (1971)

Identification of overcrowded areas in urban centres and a study of measures to ease or reduce overcrowding (eresettlement in other areas or high density housing projet is hoped that the survey will result in a number of projects for house building financed by UNDP under specifund projects, in collaboration with bilateral donors.

## (f) Study on Maintenance, Modernization and Repairs of Houses (1972)

The demands for maintenance, modernization and repairs to existing housing stocks are increasing. A study of measures necessary for effective housing management - maintenance, repairs and modernization - will be undertaken and will contain practical recommendations to governments.

## 58. Building Research and Standardization

The following specific sub-project will be undertaken during the quinquennium:

(a) Inventory of Existing Agencies and Institutes
concerned with Building Standardization and
Research (1969-1973)

The inventory will list all existing institutions engaged in building standardization and research and the tasks which they are undertaking, as a basis for improving the efficiency of the construction industry through production of standard components.

The project will be undertaken in collaboration with Universities and University Colleges of Science and Technology in Africa as well as Departments or Institutes of Tropical Architecture outside Africa. The ECA Section for Science and Technology will assist the Housing Section in implementing this project.

Interested specialized agencies and other organizations will be invited to participate in all sub-projects.

## CONTINUING TASKS

The following continuing tasks will be undertaken during the quinquennium:

- a) providing advisory services and undertaking advisory missions to member countries, on request, in the field of housing, building and physical planning, including: formulation of policies; establishment of national machinery for physical planning and to implement housing programmes; formulation and elaboration of land use policies; promotion of aided self-help methods and the establishment of housing cooperatives; development of the building materials industry; research and extension services; documentation. Pilot projects will be undertaken as necessary in any of these fields:
- b) giving assistance to and maintaining liaison with universities building colleges and other institutions and organizations in the field of housing, building and physical planning;
- c) preparing, as required, revising and re-issuing studies, documents and papers not linked with specific projects and sub-projects, including brochures, handbooks and manuals on various aspects of housing, building and physical planning;
- d) assisting, as necessary, in implementing the programmes of other divisions and sections of ECA and the African programmes of Specialized and Operating Agencies of the United Nations,

  IDEP and dimilar organizations;
- e) following up former projects, sub-projects and visits by correspondence, elaboration of reports and recommendations, etc.

In the course of the quinquennium, it is expected that specific projects and sub-projects may arise from the projects and continuing tasks listed above.

## XI. STATISTICAL SERVICES

Responsibility: RESEARCH AND STATISTICS DIVISION 1

Development and Training Section; National Accounts

and Financial Statistics Section; and General

Statistics Section

## STAFF RESOURCES

		<u>D-1</u>	<u>P-5</u>	<u>P-4</u>	<u>P-3</u>	<u>P-2/1</u>	GS
Division Direction	1967		1		_	-	11 /
	1968	_	1	_			14ª/
	1969*	1	_		.· — :	_	14
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Development and Training Section	on: 1967		7	7	6	2	19
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	1971*	-	1	3	3	5	18
Regional Advisers	1967	4					
provided from project funds:	1968	4					
	1969*	4					
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Proposed.

<sup>1/</sup> The staff requirements for the direction of the Division are included under "Statistical Services".

Includes three posts transferred with work from "Economic Development Planning, Projection and Policies".

### XI. STATISTICAL SERVICES

Since regional meetings on statistics began to be held in Africa, substantial improvements have been registered in the organization of statistical services, the preparation of surveys and statistical data and the training of statisticians in the region. Nevertheless, much still remains to be done to bridge the gap in the statistical information available in the African region.

In this respect, the work programme makes provision for assistance so far given to African countries to be continued, the object being to:

- improve the quality of statistical data;
- expand the area of available data;
- increase the number of statisticians;
- standardize concepts and methods in current use in the region;
- establish a system for the exchange of information;
- collect data and undertake comprehensive surveys designed to further the preparation and planning of economic and social development policies.

#### PROJECTS

## 59. Statistical Development

The object of this project is to:

- examine in conjunction with the countries concerned, the progress made and the problems arising from the development of their statistical programmes;
- study, in conjunction with the countries concerned, their requirements in technical assistance and, at their request, provide assistance with the co-operation of the Statistical Office of the United Nations and the Bureau of Technical Assistance Operations, through regional statistical advisers;
- prepare documentation and service the Conference of African Statisticians.

The following meetings will be held during the quinquennium:

- (a) Sixth Session of the Conference of African Statisticians (1969)
- (b) Seventh Session of the Conference of African Statisticians
  (1971)
- (c) Eighth Session of the Conference of African Statisticians (1973)

Interested specialized agencies and other organizations will be invited to participate.

### 60. Establishment of Statistical Norms for Africa

This implies research into statistical methods and the preparation of documents on methodology generally to be used at seminars and working parties of experts, organized for the exchange of ideas on how to make statistics easier to compare, regionally and internationally, and adapt international norms to Africa.

As a result of the revision of the United Nations System of national accounts and the preparation of a new standard presentation of data, surveys will be undertaken and meetings held to publicize the new system on national accounts and discuss data preparation on the required basis as follows:

- (a) Analysis of Country Data on Prices Used in Valuing Agricultural
  Commodities for National Accounts Purposes (1968-1970)
- (b) Seminar on the Revised United Nations System of National Accounts (1970)
  - (c) Working Group on the Estimation of Transport, Commerce and Related
    Services in the Compilation of National Accounts (1971)
- (d) Working Group on Inter-Industry Relations (1972)
  - (e) Working Group on Flow of Funds (1973)
- (f) Study of the Application of the Revised System of National
  Accounts in African Countries (1973-1974)

The following meetings will be held as part of the effort to standardize concepts:

- (g) Working Group on Data Processing of Population Censuses (1969)
- (h) WHO/ECA Seminar on Health Statistics (1969)

- (i) Seminar on Statistics of Prices and Quanta (1969)
- (j) Working Group on Industrial Statistics (1969)
- (k) Second African Seminar on Civil Registration and Vital Statistics (1970)
- (1) Working Group on Public Sector Statistics (1970)
- (m) Study of Statistics required for Manpower Planning (1970)
- (n) Meeting to Consider Statistics Required for Educational Planning
  (1971)
- (o) Seminar on Distribution and Transport Statistics (1971)
- (p) Study of Demography of Nomads in African Countries (1972)
- (q) Study of Age Reporting Techniques under Different African Conditions (1972)
- (r) Working Group on Statistics and Studies on Nomadic Populations (1972)
- (s) A Preliminary Study of Estimation of National Wealth in Selected
  African Countries (1972-1973)
- (t) Seminar on Balance of Payments Statistics (1973)

Assistance will be requested from UNDP, through the regional programme of technical assistance, in running sub-projects (b), (c), (d), (e), (g), (i), (j), (k), (l), (o) and (r) above. The co-operation of the United Nations Statistical Office and of Specialized and Operating Agencies will be requested as appropriate. Other ECA divisions and sections will assist the Research and Statistics Division as appropriate in implementing the sub-projects.

# 61. Statistical Studies

This project entails the analysis of statistical data and statistical aggregates which will provide basic studies for the preparation and planning of economic and social policy.

The following studies will be undertaken during the quinquennium:

- (a) Study of the Purchasing Power Parity of African Currencies
  (1968-1971)
- (b) Study of the Pattern of Private Consumption Expenditure in African Countries (1969-1971)
- (c) Study of the Structure and Importance of Non-Monetary Activities in African Countries (1969-1971)
- (d) Study of the Structure of the Public Sector (1969-1971)
- (e) Study of the Structure and Change in Capital Formation in African Countries between 1960 and 1970 (1970-1972)
- (f) Study of Changes in the Terms of Trade for African Countries
  (1970-1972)
- (g) Study of Price Movements in African Countries by Type of Economic Activity during the Period 1960-1970, in Relation to Similar Movements in Other Regions (1971-1973)
- (h) Study of the Public Debt of African Countries (1971-1972)
- (i) Study on the Level and Burden of Taxation in African Countries
  (1972-1973)
- (j) Study on the Growth of Capital Budgets in African Countries
  During the Period 1960-1970 (1972-1974)

Other ECA divisions and sections will assist the Research and Statistics Division in implementing this project.

62. Collection, Exchange and Distribution of Information

The purpose of this project is to:

- collect and analyse statistical data for the African countries;
- prepare and distribute statistical data covering all the countries in the region;
- publish information on statistical activities.

The following publications will be issued during the quinquennium:

Quarterly Publications

- (a) Statistical Newsletter
- (b) Statistical Bulletin for Africa
- (c) Foreign Trade Statistics of Africa Series A Direction of Trade

#### Half-Yearly Publications

(d) Foreign Trade Statistics of Africa Series B:

Trade by Commodity and by Country

## Annual Publications

- (e) Yearly Statistics of Industrial Production
- (f) African Statistical Yearbook

# Occasional Publications

- (g) Manual on Sample Survey Methods in Africa: Household Economic
  Surveys (1969)
- (h) <u>Manual on Sample Survey Methods in Africa: Dem. graphic Surveys</u>
  (1970)
  - (i) Bulletin of National Accounts for Africa (1970)

#### CONTINUING TASKS

The following continuing tasks will be undertaken during the quinquennium:

(a) providing advisory services and undertaking advisory missions to Member Countries, on request, in the field of statistics, including giving assistance to governments to enable them to establish training centres in the sub-regions, with the help of the UNDP:

- (b) giving assistance to and maintaining liaison with central statistics offices, statistical training centres, universities and o other statistics institutions and organizations, including:
  - (i) the middle-level Training Centre in Dar-es-Salaam (Tanzania);
  - (ii) the higher-level Institute of Statistics and Applied

    Economics in Rabat (Morocco);
    - (iii) the International Statistical Training Centre, Yaoundé (Cameroon);
    - (iv) the Institute of Statistics and Applied Economics in Kampala (Uganda) which is being established;
    - (v) Haile Selassie I University, Addis Ababa (Ethiopia).
    - (c) preparing, as required, revising and re-issuing studies, documents and papers not linked with specific projects and subprojects;
    - (d) co-operating, as necessary, in implementing the programmes of other divisions and sections of ECA and the African Programmes of United Nations Headquarters, Specialized and Operating Agencies of the United Nations, IDEP and similar organizations;
    - (e) following up former projects, sub-projects and visits by correspondence, elaboration of reports and recommendations, etc.;
    - (f) collecting available data on population, national accounts, prices, currency, banking transactions, domestic and foreign trade, balance of payments, industry, agriculture, transport and various other fields;
    - (g) standardizing and maintaining punch card records of data collected for purposes of comparison and publication;
    - (h) analysing statistical data and aggregates for the countries in each sub-region and the region as a whole;

(i) the IBM-20-8K computer will be utilized for data processing on industrial production, national accounts, foreign trade, transport and liquid assets in the region, administrative tasks within the secretariat, maintaining African data records, and other appropriate tasks as required. It will also be used for research, demonstration and training and to provide on request, assistance to countries which have no data processing equipment or which have not sufficient capacity.

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## XII. SCIENCE AND TECHNOLOGY

Responsibility: NATURAL RESOURCES AND TRANSPORT DIVISION-

Science and Technology Section

## STAFF RESOURCES

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Science and Technology Section	1967 1968 1969* 1970* 1971*		1 1 1 1	1 1 2 2	- 1 1 1	- - 1 1	1 1 1 4 4
Regional Advisers provided from project funds	1967 1968 1969*	_ _ _					
	1970* 1971*	1 2			1		

<sup>\*</sup> Proposed.

<sup>1/</sup> The staff requirements for the direction of the Division are included under "Development of Natural Resources".

#### XII. SCIENCE AND TECHNOLOGY

Industry provides the equipment and the consumer goods which constitute the material basis for a higher standard of living. Promoting industrialization is a complex endeavour which includes such activities as development and organization of markets, the establishment of plants using appropriate technology for the production of capital and consumer goods, the provision of basic raw materials to these plants either by importation or by exploitation of the natural resources of the region and finally the creation of an adequate infrastructure to supply water and power and to provide communication and transport. The realization of all these tasks in the developed countries has been made possible by the advances in science and technology and the application of the knowledge in these fields to the solution of human wants.

Agriculture provides the raw materials for food and fibre. Increase in the supply and improvement in the quality and variety of foodstuffs are necessary to maintain existing levels of living standards in a growing population. To ensure an improvement in living standards, the food supply will need to expand much faster than the population and hence the productivity of agriculture must be raised. This is why agriculture in Africa has to be modernized. Modernization means, apart from other improvements in marketing and distribution, the application of science and technology to the various operations in farming.

The connexion between the modernization of agriculture and the application of science and technology is just as direct as it is for industrialization. It is through scientific research that man has been able first to determine and then to manipulate the relationships between the inputs into farming and the yield in terms of more and better crops and livestock.

It is also through the application of science and technology that improved methods of storage and handling and, where necessary, new methods of processing have been developed to enable more people to enjoy the benefits of increased production.

Industrialization and modernization of agriculture will involve the acquisition of a considerable range of scientific expertise and technology, and the dissemination of this knowledge in usable form within the economy. This can only be effectively done by the education and training of the necessary manpower. Hence a major priority for the African countries is the development of the human resources required to apply science and technology.

In addition to procuring existing scientific knowledge and technology, many countries in Africa will also need to develop a considerable amount of new technology to enable them to utilize their natural resources and to provide a solution to production problems which are peculiar to their environment. Hence the next priority is the creation of an infrastructure of institutions for research and development, to promote the discovery of new knowledge and the adaptation of existing technology to the solution of peculiar or local problems.

In the advanced countries, many of the activities necessary to provide the needs just stated arose from isolated initiatives. Hence it took several conturies to create the existing networks of institutions and organizations that produce the scientific and technical manpower and form the foundations of modern industry and agriculture. Recently, spectacular progress has been made by the same countries through conscious planning of the use of science and technology to promote economic growth and other development activities.

For the African countries, the necessity to plan consciously for the use of science and technology is inescapable if the modernization of Africa is to take place within the foreseeable future. It is therefore imperative that the various Governments develop capability within their administrative

systems for policy-making and planning in science and technology similar to provisions for other sectors of the national life.

The ECA's role in the development of Africa has been to assist member countries to build up their economies and in particular to develop the capacity to solve most of their own problems. To do this, ECA is expected to carry out studies and surveys to elucidate the development needs of the African countries and to make inventories of the resources of all types which exist and which must form the basis for any programmes of action. From the results of such studies and surveys, advice can be given on necessary policies and programmes.

In another context, the ECA is also available to assist member States in planning programmes to satisfy several needs, whether for the creation or organization, for development of manpower or for the establishment of institutions.

## PROJECTS

- 63. The Development of National Structure for Planning and Administration in Science and Technology
  - (a) Surveys of Government Machinery for Planning and Administration in Science and Technology
    - (i) North African Survey of Government Machinery for
      Planning and Administration in Science and Technology
      (1969)
    - (ii) East African Survey of Government Machinery for
      Planning and Administration in Science and Technology
      (1970)
    - (iii) West African Survey of Government Machinery for
      Planning and Administration of Science and Technology
      (1970)

(iv) Central African Survey of Government Machinery for
Planning and Administration of Science and Technology
(1970)

UNESCO will be invited to collaborate in these studies. The ECA Public Administration Section will co-operate with the Science and Technology Section in undertaking this sub-project.

- (b) Studies of the Organizational Needs for a Scientific
  Public Service in Selected African Countries
  - (i) Study of the Organizational Needs for a Scientific
    Public Service in Selected English-speaking Countries
    (1970)
  - (ii) Study of the Organizational Needs for a Scientific Public Service in Selected French-speaking African Countries (1970)

Each study will include a general consideration of principles based on the experience of developed countries and case studies in selected African countries. The studies will lead to a report for each language group and recommendations for action. Advice and assistance will be given to individual governments in this field, on request.

The ECA Public Administration Section will co-operate with the Science and Technology Section in undertaking this sub-project.

# (c) Training Courses for Science Administrators

These courses will be organized in a developed country and will involve lectures and visits to a number of establishments:

- (i) Training Course for Science Administrators (1970)
- (ii) Training Course for Science Administrators (1971)

UNESCO and bilateral donors will be invited to collaborate. The ECA Public Administration Section will co-operate with the Science and Technology Section in undertaking these courses.

Assistance will be requested from UNDP, through the regional programme of technical assistance.

(d) Seminar on the Role of Government Scientific and Technical Institutions in Economic Development (1972)

Assistance will be requested from UNDP through the regional programme of technical assistance.

(e) Seminar on the Management of Scientific Research Establishments (1973)

Assistance will be requested from UNDP through the regional programme of technical assistance.

- 64. Development of Methodology and Techniques for Planning the Science and Technology Sectors of National Development Plans
  - (a) Study of the Principles and Procedures for Planning the Science and Technology Sectors of National Development Plans (1971)

This will involve three case studies in selected

African countries. Each case study will take about three

months. The study will be made available to Member States.

- (b) Seminar on Science Planning for Economic Development (1971)

  Assistance will be requested from UNDP through the regional programme, of technical assistance.
- (c) Training Courses in Science Planning
  - (i) Training Course in Science Planning (1972)
  - (ii) Training Course in Science Planning (1973)

These courses are intended for officials in the science policy-making and planning bureaux of member States.

Assistance will be requested from UNDP through the regional programme of technical assistance. The ECA Research and Statistics Division will co-operate with the Science and Technology Section in undertaking this subproject.

(d) Seminar on the Organization and Collection of Science Statistics (1973)

Assistance will be requested from UNDP through the regional programme of technical assistance. The ECA Research and Statistics Division will co-operate with the Science and Technology Section in undertaking this project.

- 65. The Development of Manpower for Science and Technology
  - (a) Studies and Proposals for Centres of Excellence
    - (i) Study and Proposals for a Centre of Excellence in Applied Science and Technology (1969)

UNESCO and OAU will be invited to collaborate.

(ii) Study and Proposals for a Centre of Excellence in Engineering Synthesis and Design (1970)

This study will be undertaken jointly with the German Foundation for Developing Countries.

- (iii) Study and Proposals for a Centre of Excellence in Production Engineering (1972)
- (b) Seminars on the Education and Training of Design Engineers
  - (i) Seminar on the Education and Training of Design
    Engineers in English-speaking Countries (1969)

This seminar will be run jointly with the German Foundation for Developing Countries.

(ii) Seminar on the Education and Training of Design
Engineers in French-speaking Countries (1970)

UNESCO will be invited to collaborate.

Assistance will be requested from UNDP, through

(c) Seminar on the Application of New Teaching Techniques in the Expansion of Science Teaching (1971)

UNESCO will be invited to collaborate.

Assistance will be requested from UNDP through the regional programme of technical assistance.

(d) Seminar on Material Science and Technology (1972)

This seminar will be held in USSR.

Assistance will be requested from UNDP, through the regional programme of technical assistance

- 66. The Creation of an Informed Public on Science and Technology and its Application to Development
  - (a) Seminar on Science and Mass Media for French-speaking
    Countries (1970)

Assistance will be requested from UNDP, through the regional programme of technical assistance.

(b) The Introduction of a Science and Technology Feature
Section in One Leading Newspaper in English-speaking
Africa (1970)

This will be a pilot project.

Bilateral donors of technical assistance will be invited to collaborate.

(c) <u>Development of Extra-Mural Science Popularization in</u>

<u>African Universities (1972)</u>

- 67. Development of Institutional Infrastructure for Practically-Oriented
  Research and Development
  - (a) Freparation of Proposals and Project Reports for a Regional
    Institute of Fuel Science and Technology (1969)

In its first phase, the Institute will deal with methods of exploration and evaluation of oil property, fuel policy and strategic studies, market planning and development. It will also undertake and arrange training of higher-level specialists for the fuel and petroleum industries.

(b) Preparation of Proposals and Project Reports for the
Establishment of University Postgraduate Courses in
Natural Resource Planning and Development (1970)

The ECA Natural Resources Section will co-operate with the Science and Technology Section in undertaking this project.

(c) <u>Seminar on the Standardization of Basic Units of</u>

Measurement and the Adoption of the Metric System (1969)

Assistance will be requested from UNDP through the regional programme of technical assistance.

(d) Regional Symposium on Resources of the Sea (1970)

Assistance will be requested from UNDP through the regional programme of technical assistance.

(e) Study on the Establishment of National Standard
Organization in Selected African Countries (1970-1971).

UNIDO and ISO will be invited to collaborate.

(f) Seminar on Technical Service Organizations for Industrial Development (1971)

Assistance will be requested from UNDP through the regional programme of technical assistance. The ECA.

Industry and Housing Division will co-operate with the Science and Technology Section in undertaking this sub-project.

(g) Seminar on New Techniques for the Survey and Inventory of Natural Resources (1973)

Assistance will be requested from UNDP through the regional programme of technical assistance. The ECA Natural Resources Section will co-operate with the Science and Technology Section in undertaking this sub-project.

- 68. Promotion of Regional Co-operation in Science and Technology
  - (a) Study of Areas of Collaboration and Joint Planning in

    Science and Technology Among the Countries of the East

    African Community (1969)
  - (b) Study of Areas of Collaboration and Joint Planning in Science and Technology Among the Countries of the West African Community (1969)
  - (c) Regional Symposium on the Utilization of Science and Technology for Development in Africa (1969)

UNESCO and OAU will be invited to collaborate.

Assistance will be requested from UNDP through the required programme of technical assistance. Interested specialized agencies and other organizations will be invited to participate.

#### CONTINUING TASKS

The following continuing tasks will be undertaken during the quinquennium:

(a) preparing and undertaking studies and projects for the promotion in general of the application of science in agriculture and industry, for the exploitation of natural resources and for the, improvement of transportation;

- (b) providing advisory services and undertaking advisory missions to Member Countries, on request, on science and technology;
- (c) giving assistance to and maintaining liaison with universities, institutes and other institutions and organizations in the field of science and technology;
- (d) preparing, as required, revising and re-issuing studies, documents and papers not linked with specific projects and subprojects;
- (e) co-operating, as necessary, in implementing the programmes of other divisions and sections of ECA and the African programmes of United Nations Headquarters and Specialized and Operating Agencies of the United Nations, IDEP and similar organizations. In particular, assistance will be given in:-
  - (i) Preparation of the African Region portion of the World Plan of Action (WPA) for science and technology;
  - (ii) Arranging the regional meeting of Ministers on the application of science and technology to development in Africa (CASTAFRICA) being organized by UNESCO;
- (f) promoting regional co-operation in science and technology including the setting up of machinery for co-operation, identification of areas of collaboration and the development of specific projects for collaboration;
- (g) following up former projects, sub-projects and visits by correspondence, elaboration of reports and recommendations, etc.;

It is expected that during the quinquennium further specific projects may develop out of the projects and continuing tasks enumerated above.