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IMPLEMENTATION OF THE LAGOS PLAN OF ACTION - SOME PROPOSALS AND  
RECOMMENDATIONS FOR THE GUIDANCE OF MEMBER STATES

By  
the ECA Secretariat

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I. Introduction - A restatement of the arguments for, assumptions, origin and characteristics of the Monrovia Strategy for the development of Africa and of the Plan of Action for implementing it

Anyone who has been following since 1976 African activities connected with the challenge of the call for a new international economic order, organized by the Economic Commission for Africa, singly or in association with other organs, will one way or the other be acquainted with the major reasons why a new strategy for Africa has been proposed. In particular, anyone who has read the document entitled "Revised Framework of Principles for the Implementation of the New International Economic Order in Africa" (E/CN.14/ECO/90/Rev.3); followed the discussions of the Colloquium on Perspectives of Development and Economic Growth of Africa up to the Year 2000, Monrovia, Liberia, 12-16 February 1979; read the documents for, and the report on the Seminar on Alternative Patterns of Development and Lifestyles for the African Region, Addis Ababa, 5-9 March 1979, and the proceedings of the fifth meeting of the ECA Conference of Ministers of Economic Development and Planning, Rabat, Morocco, 20-28 March 1979, should by now be familiar with the past bad performances of African economies, the dangers of continuing with past policies and the imperative need for a change of course. To such people a restatement of the arguments and assumptions underlying the Monrovia Strategy for the Development of Africa and of the Plan of Action for its implementation, including their origin and characteristics, may seem repetitive and superfluous. Yet, apart from the fact that not all those who should have been following these activities have in fact done so there are at least two other reasons why a restatement of such arguments, assumptions, origin and characteristics is important: (i) while repetition is boring it is also a highly effective mnemonic technique; and (ii) if an action plan is to be properly implemented, the basic arguments and assumptions underlying it and which constitute its rationale and *raison-d'être* ought to be restated when the guiding principles for its implementation are being outlined. Indeed, there is always a great advantage in linking the basic arguments and assumptions integrally with the guidelines for action. These, then, are some of the reasons why it has been thought necessary to restate, albeit briefly, the arguments and assumptions underlying the Monrovia Strategy for the Development of Africa and the Plan of Action for its implementation, including their origin and characteristics.

It is necessary to recall that the Monrovia Strategy is not the first strategy to be designed for Africa. There was "Africa's Strategy for Development in the 1970s" (ECA Resolution 218(XI), adopted by the ECA Conference of Ministers at its first meeting at Tunis, Tunisia, in February 1971. There was the OAU "African Declaration on Co-operation, Development and Economic Independence", adopted by the Assembly of Heads of State and Government of OAU in May 1973. Similarly, two international global development

strategies have been established and implemented by the United Nations General Assembly. In one sense, it might almost be said that the Monrovia Strategy is a logical follow-up to the strategies for the 1970s, but there are many reasons why this is not the case. In fact, in many ways, the Monrovia Strategy is a product of the critique of past development strategies. Thus, it can genuinely be said that it was deemed necessary because of the failures of past development strategies to address properly the development and economic growth needs and problems of African countries. However, the proximate cause of the formulation of the Strategy was the call for a new international economic order by the General Assembly of the United Nations at its sixth special session in April/May 1974, devoted to raw materials and development.

The main emphasis of that call was on an increase in the foreign exchange earnings from the raw materials exports of the developing countries and on a plea for better opportunities for those countries to share in the benefits derived from the pattern and structure of development already established by the western industrial economies. In effect, the call for a new international economic order by the sixth special session of the United Nations General Assembly was an unequivocal endorsement of the patterns of development and life-styles of the developed market economies. And this was at a time when citizens of those countries were increasingly questioning the rationality and continued sustainability of such patterns of development and life-styles. Thus the call for a new international economic order still fails to recognize the basic issues involved in the development and economic growth of African countries. After all, even if all the aims of the new international economic order (commodity stabilization, access to the markets of the developed countries, massive transfer of resources, cancellation of debts, transfer of technology, and restructuring of world industrial capacities) were achieved that would only perpetuate the present excessive dependence on the western and eastern worlds and the continued neglect of the domestic (national, subregional and regional) markets. Indeed, it is the conservative and backward-looking nature of the call for a new international economic order that led the secretariat of the Economic Commission for Africa to make proposals for a framework for the implementation of the new international economic order in Africa.

When, in the early 1960s, economic development was seen as an essential foundation of political independence, objectives and goals such as rapid economic growth, stable prices, balance of payments equilibrium, equitable distribution of income, and other benefits of development were among those deliberately identified as worth pursuing. To achieve them, capital formation, savings and foreign exchange were identified as critical. When, towards the end of the decade, most of these objectives and goals were no near achievement, the important question of the use of domestic raw materials and other indigenous factors of production and distribution was broached. Later, the question of the efficiency of performance of development institutions, such as public enterprises and co-operatives, was vaguely addressed. All along, economic co-operation, particularly in the area of trade, was half-heartedly promoted. But unfortunately, in almost all cases, the central importance of a knowledge of domestic natural resources as the foundation of development and economic growth, as well as the basis of genuine and relevant human resources development, was not sufficiently recognized. The same applied to the crucial role of the domestic market, not only in the geographical and

physical sense, but also in terms of purchasing power, including its even distribution. The question of indigenous entrepreneurship was hardly examined. The non-viability of a process of producing raw materials so as to be able to purchase equipment and other capital services in order to pursue diversified and accelerated development and economic growth was hardly examined.

When, in the first half of the 1970s, there was a wave of "nationalizations" or "indigenizations", it became clear that the basic issues of development and economic growth were beginning to stare African countries in the face. Yet, in pursuing such policies, it was also clear that some African Governments did not fully understand the problems. Thus, after measures of this type had been taken, such Governments were again forced to bring back the original owners of the nationalized businesses as technical managers and/or advisers at exorbitant cost.

Meanwhile, not only were economic growth rates not rising as planned, they were actually falling. Indeed, except in those countries blessed with minerals, including petroleum, and a negligibly small number of agricultural countries, the output of goods and services declined progressively between 1960 and 1980. This decline was the reflection of poor agricultural performance, with its serious repercussions in terms of hunger and malnutrition; increasing balance-of-payments problems arising from poor earnings from raw materials, excessive payments for shipping, banking, insurance, brokerage, consultancy, high-level skills and other services, and the associated debt burden; and malpractices by transnational corporations and even by national undertakings. These were accompanied by an unprecedented growth of towns and cities and of shanty towns, with adverse consequences for electricity, water, transport, housing, and health and education services, which were ill-prepared to cater for such a rapid increase in the urban population; rural-urban migration with its associated differentials, not only in terms of income distribution but also of the distribution of facilities such as electricity, water, communications, transport, health, education and training services; open urban unemployment and rural underemployment; and increasing inability to design and implement autonomously, not only domestic policies but also policies for participating equally, equitably and effectively in international decision-making processes. Negotiations, whether bilaterally and/or multilaterally, were badly organized and executed. In such circumstances, the call for a new international economic order and for national sovereignty over natural resources has no meaning. Similarly, the objective of effectively attacking mass poverty rings hollow.

Indeed, despite planned development efforts in Africa over the past two decades, supported by massive aid and technical assistance by both bilateral and multilateral agencies, the continent remains the most economically, socially and culturally deprived of all the regions of the world. Whether in relation to per capita income, food production, nutrition, average life expectancy, infant and child mortality rates, literacy rates or physical quality of life, Africa remains the most backward of all the regions of the world. Even then, the foregoing represent only the end products of development and economic growth. When we add to them such factors conducive to self-respect as the ability to design and implement autonomous decisions, effective management of enterprises and institutions by indigenous entrepreneurs, administrators and managers, and ability to participate equally, equitably and effectively in international decision-making, the

position of Africa is unenviable. All this is despite the fact that the continent is well known for the abundance of its forest, mineral and other resources.

Why were things as they were and why are they still the same? The answer to this question lies in the fact that the real meaning of development and economic growth was misunderstood and the attractiveness of the fruits of such processes led to the neglect of a proper understanding of the basic underlying factors. For instance, the obsession with external markets to the neglect of domestic, subregional and regional markets is contrary to the historical facts of development. Thus the United Kingdom and other developed countries, including those of the CMEA, used their domestic markets as the basis for their development and economic growth. Similarly, when these countries speak about factors of production, there can be no doubt that they mean first and foremost indigenous entrepreneurs, indigenous scientists and technologists, indigenous market analysts and distributors, indigenous technology and indigenous raw materials, equipment, parts and components. In the same way, when they speak about money and finance, they mean their own money and finance, which are in demand because of the availability of the goods and services which such can be used to purchase. Of course, they do engage in trade but in order to obtain those goods and services which they do not possess, but these are mainly supplementary in character and do not constitute the heart of their development and economic growth. Overall, it is this understanding of development and economic growth, and the design of appropriate policies and institutions to pursue it, that constitute the basis of their confidence, their ability to tackle their economic, social, cultural and technological problems, including their successful attack on mass poverty, and to dictate the pace of international development and economic growth, including the manipulation to their own advantage of international institutions and relations.

On the other hand, when African countries plan, they usually relate their growth rates to those in the advanced countries. But once this is done, it automatically determines the technological mix, the income distribution both within the African countries and between them and the developed countries, and neglects the problem of developing indigenous entrepreneurship, relevant high-level skills and an attack on mass poverty. It is clear that, if past approaches are continued, mass poverty and unemployment will persist, sovereignty over natural resources will not be achieved, equal, equitable and effective participation in international relations will remain out of reach, and increasing balance-of-payments problems and the associated debt burden will for ever remain the African lot. The fact is that the present approaches cannot be sustained.

It was against the background of the foregoing that it was deemed necessary to establish a new development strategy for Africa for the 1980s and beyond. In this connexion, reference has already been made to the document entitled "Revised Framework of Principles for the Implementation of the New International Economic Order in Africa", the Colloquium on Perspectives of Development and Economic Growth of Africa up to the Year 2000, the Seminar on Alternative Patterns of Development and Lifestyles for the African Region, and the fifth meeting of the ECA Conference of Ministers of Economic Development and Planning. These are the signposts on the road to the establishment of the Monrovia Strategy for the Development of Africa and of the Lagos Plan of Action for its implementation.

Thus, the "Revised Framework of Principles for the Implementation of the New International Economic Order in Africa", which was approved by the Executive Committee of ECA in 1976 and endorsed by the Assembly of Heads of State and Government of the Organization of African Unity in June 1977, is the intellectual ancestor of the Monrovia Strategy for the Development of Africa, adopted by the Assembly of Heads of State and Government at its meeting in Monrovia in July 1979. And the Monrovia Strategy itself is, under a new name, the "Development Strategy for Africa for the Third Development Decade" (ECA resolution 332(XIV) and its Annex A), which was formulated and adopted by the ECA Conference of Ministers of Development and Planning at its fifth meeting in Rabat, Morocco, in March 1979 and transmitted together with the relevant background documents to the Assembly of Heads of State and Government as working documents.

Just as the Monrovia Strategy for the Development of Africa is another version of the "Development Strategy for Africa for the Third Development Decade", the Lagos Plan of Action for the Implementation of the Monrovia Strategy is another version of the "Plan of Action for the Implementation of the Monrovia Strategy for the Economic Development of Africa Recommended by the ECA Conference of Ministers Responsible for Economic Development at its sixth meeting at Addis Ababa, 9-12 April 1980 to the first Economic Summit of the Assembly of Heads of State and Government of the Organization of African Unity, Lagos, Nigeria, 28 and 29 April 1980" (E/CN.14/781/Add.1). That Plan of Action was formulated in response to the call made by the Assembly of Heads of State and Government in resolution AHG/Res.96/(XVI)/Rev.1 (resolution on holding an extraordinary session of the Assembly of Heads of State and Government on economic problems of Africa) to the ministers responsible for economic development to prepare the ground for the proposed extraordinary session so as to facilitate fruitful discussion of economic problems. In this connexion, the introductory part of the Plan formulated by the Ministers of Economic Development and Planning, which is not part of the Lagos Plan of Action, is worth reading and keeping as part of the Lagos Plan, since it provides some insights into the background to the Plan and measures for its implementation.

What are the main features and characteristics of the Strategy and the Plan?  
Basically, the Strategy and the Plan emphasize:

- (i) the importance of the domestic, subregional and regional markets for the supply of factor inputs (raw materials, machinery, technology, and manpower skills for entrepreneurial activities, project identification, analysis and implementation, management, marketing, and support services, whether advisory, banking, insurance, transport and communications, etc.) and the final consumption of goods and services;
- (ii) the imperative need for knowledge of the natural resources base, not only for determining product lines but also for planning the internal development of the skills required for the identification, exploration, evaluation and development of such resources and for organizing and managing production and distribution;
- (iii) planning in terms of multiple objectives (both from the supply and demand sides) and in real terms, as opposed to planning approaches based on the assumption of a single main objective (e.g. economic growth);

- (iv) the intra and intersectoral linkages, intra and intergroup and spatial considerations that such an approach to planning demands. Thus, the industrial sector is designed to make possible the supply of the bulk of the industrial inputs required for agricultural production, processing, storage and transportation (agricultural chemicals, equipment, including implements and tools, etc.), as well as building materials, metal and engineering products and chemicals for the transport and communications, mining, energy and other sectors which make use of capital goods. The food and agriculture programme (which includes forest products and fibres) provides not only inputs to the processing industries but also markets for industrial products of the kind just listed. The importance of intra and intersectoral linkages is also stressed for other sectors, such as transport and communications, energy, science and technology, human resources development, etc., (see E/CN.14/781/Add.1, pages 5 and 6, paragraphs 21-31 for full discussion of these linkages); and,
- (v) the imperative need to involve, at all stages of the formulation and implementation of development plans, all the principal decision-making agents and instruments in the economy; State enterprises and public utilities; development corporations and development banks; indigenous and foreign private enterprises; R&D establishments; universities and polytechnics; farmers' organizations; community leadership groups; river and lake basin and similar authorities dealing with the development of agricultural or geological regions; business support institutions; associations of engineers, scientists and technologists; and development organs such as ECOWAS, UDEAC and the MULPOCs, which may be entrusted with organizing and encouraging the participation of some of the agents and instruments referred to earlier.

As to underlying arguments, it can safely be said that the arguments underlying the Strategy and the Plan are that: (i) economic growth means increases in the physical output of goods and services for the benefit of the mass of African populations; (ii) these increases must come from the exploitation, primarily, of raw materials drawn from the natural resources base of African countries, supplemented by trade in complementary raw materials; (iii) the process of converting raw materials into semi-finished and finished products requires an expanding indigenous supply of relevant factor inputs, i.e. of skilled and semi-skilled manpower for entrepreneurial functions, management, production, marketing and distribution, research and development; equipment; raw materials; institutional services, etc.; (iv) a restructuring of national domestic markets is necessary, as well a combination of national markets in order to achieve economies of scale; and (v) the key factor is the development of indigenous entrepreneurial capabilities (public and private), underpinned by appropriate support services.

Coupled with all these are the following assumptions: (i) African governments and peoples are aware of the increasing gap between promises and performance; (ii) they are convinced that to continue with present approaches is futile and fraught with the dangers of continued mass poverty and the consequent risk of political and social instability; (iii) when they talk about self-reliant and self-sustaining development, they understand and mean it; (iv) they are determined to reduce progressively their present burdensome and unacceptable dependence on others for the basic requirements for development and



economic growth (technology, manpower, knowledge, equipment, parts and accessories and even markets); and (v) they are determined to make a frontal attack on mass poverty and widespread unemployment and underemployment.

In basing the African Strategy and the Plan of Action on these assumptions, African countries are not unaware of at least three crucial factors - time, sacrifice and assistance from abroad. In all development efforts that require problems to be identified, analysed and decisions taken about how to solve them, time is very important. African countries are therefore not so naive as to think that the goals and objectives which they have set themselves will be achieved overnight. Indeed, they are aware that the process will be a lengthy one. Similarly, they are aware of the basic truth that there is no such thing as instant development and economic growth. Hence, there is no way of avoiding either sacrifices or the real costs of development and economic growth. Finally, they are also aware of the need for assistance from abroad. However, such assistance must be relevant in the sense of assisting in the attack on the problems that they have themselves identified, reducing the time involved, and lessening the extent of the poverty that may linger on for some time.

The remainder of this document is therefore devoted to considering how concrete actions can be initiated by member States to implement the Strategy and the Plan, both in the spirit and in the letter. However, before going into the details of such actions, it is necessary to indicate briefly what steps were taken to apprise the international community of the existence of the major documents that have been mentioned above and what use that community, through the United Nations General Assembly, has made of them.

In the first place, the "Revised Framework of Principles for the Implementation of the New International Economic Order in Africa" was transmitted to the General Assembly of the United Nations and was specifically taken into account in the relevant General Assembly resolution (33/193) on preparations for the international development strategy for the Third United Nations Development Decade. The Monrovia Strategy was transmitted to the Preparatory Committee for the International Development Strategy and the United Nations General Assembly, with a request that it should be made an integral part of the new international development strategy. The Lagos Plan of Action was transmitted to the eleventh special session of the General Assembly, devoted to the adoption of the new international development strategy and the launching of the series of global negotiations, as document A/S-11/14, Annex I. But more important is the fact that some of the arguments presented in those documents, and particularly in the Lagos Plan of Action, and some of the recommendations presented therein have featured prominently in the new international development strategy (document A/35/464).

Thus, in paragraph 11 of document A/35/464, "Development and International Economic Co-operation - International Development Strategy for the Third United Nations Development Decade", it is stated that "specific regional problems of developing countries, where they exist and are included in regional development strategies, such as the Lagos Plan of Action for the Implementation of the Monrovia Strategy for the Economic Development of Africa (see A/S-II-14 Annex I), will also be taken into account through effective and adequate measures within the framework of the general policy measures adopted in favour of all developing countries". Similarly, in paragraph 20 where the quantitative growth targets are discussed, it is stated that "On the basis of regional needs, circumstances and patterns of growth, more specific regional goals may be elaborated in



the framework of the regional commissions". This is again an unequivocal recognition of the Lagos Plan of Action. Again, paragraph 33 states that "Developing countries should also acquire improved capacity to explore and develop their natural resources and to ensure closer integration of the sector in the overall development of their economies". Paragraph 37 points out that "Measures should be focused on promoting a self-sustained process of development, on accelerating agricultural and industrial progress and on ensuring the development of human resources and broadly-based participation in development". Finally, in paragraph 47 it is stated that "The absence or shortage of trained and qualified national personnel often limits the capacity of developing countries to take full advantage of existing or potential development opportunities. The provision of the required trained and qualified personnel on a scale assuring national self-sufficiency in this respect would constitute an important contribution to the achievement of the development goals of developing countries. The international community should provide adequate financial and technical resources to support the training of national personnel in all sectors of social and economic activities in the developing countries."

The foregoing are some of the main features of the African Strategy and the Plan of Action that are highlighted in the international development strategy for the Third United Nations Development Decade. In the nature of things, global strategies cannot but be general and diffuse in nature. This is not only because many and varied interests are involved but also because the issues on which attention has to be focused, and particularly policy measures, have to be those on which the international community can easily act. Yet, no strategy can really be meaningful unless concrete problems are identified, together with the measures for dealing with them, particularly at the national level. The tendency for global strategies to deal only with global issues, under which national and regional issues are submerged, is one other reason why it was thought necessary to formulate a new strategy and the plan for its implementation. In all seriousness, the Strategy and the Plan strongly emphasize the fact that the foundations of sound, self-sustaining and self-reliant development and economic growth must be laid at the national level. Indeed, about 90 per cent of the Plan will have to be initiated and implemented at the national level.

## II. Implementation of the Lagos Plan of Action at the National Level: Some Guidelines for Action

In adopting the Lagos Plan of Action for the implementation of the Monrovia Strategy for the Development of Africa, member States instructed the Secretary-General of the Organization of African Unity and the Executive Secretary of the United Nations Economic Commission for Africa to take measures to implement the Plan. The drawing up of guidelines for the implementation of the Plan at all levels is one of the measures required. Such guidelines must start with action at the national level, where socio-economic problems occur and where emphasis on implementation has been appropriately placed. This complicates the task, however, since there are at present 50 member States and due to various factors (availability of natural resources and high-level skills, access to aid and technical assistance and the zeal with which Governments have pursued development and economic growth policies in the past) these are at different levels of development and face different types of problems. The result is that different parts of the guidelines will apply to different countries.

One other factor which must also be borne in mind is that the guidelines are not and cannot be exhaustive, for at least two reasons: however up to date the secretariat may be in its monitoring of development activities in the region, it cannot be aware of the most recent innovations introduced by member States, and since in the nature of things, this document must be kept within manageable proportions, the secretariat has to be selective in what it proposes.

For these reasons, it is sincerely hoped that representatives of member States will enlarge and improve upon the suggestions made here during the discussion of the document so that more comprehensive and relevant guidelines for the implementation of the Plan may be issued after the meeting.

(a) Educational and diffusional aspects of measures to implement the Plan at the national level

The Lagos Plan of Action only provides a framework for action by member States and their development co-operation partners. Hence, its effective implementation depends on the relevance of the issues addressed therein to the specific development and economic growth problems facing each member State. The first task that has to be tackled at the national level is therefore to familiarize the Government, the peoples and the agents of production and distribution in particular and of decision-making in general of each member State with the origin, goals and objectives, and characteristics of the Plan.

Recommendation 1: National seminar or conference

In this connexion, it is recommended that each member State should organize a national seminar or conference for the above purpose. Inputs into such a seminar or conference will comprise: (i) the text of the United Nations General Assembly resolution on the Declaration and the Programme of Action on the Establishment of a New International Economic Order; (ii) Revised Framework of Principles for the Implementation of the New International Economic Order in Africa; (iii) the Monrovia Strategy for the Development of Africa; (iv) the Lagos Plan of Action for the Implementation of the Monrovia Strategy for the Development of Africa; and (v) a report containing an assessment of the history of planned development efforts in the member State.

Recommendation 2: National sectoral or functional workshops

Inevitably, discussions in the seminar or conference are bound to be general in character, even though such discussions will be tied to the specific aspirations, and problems of the member State concerned. Hence, there is a further need for a deeper understanding of the issues involved, particularly at the sectoral or functional level.

For this reason, it is further recommended that the national seminar or conference should be followed by national sectoral or functional workshops. Inputs into such sectoral or functional workshops will include: (i) the sectoral studies which formed the basis of the Lagos Plan of Action; and (ii) the relevant national sectoral or functional studies.

Recommendation 3: Use of mass media

While the seminar/conference and workshops are recognized forms of communicating ideas, not every citizen or even every decision-maker may benefit from such approaches.

It is therefore recommended that the mass media, and particularly radio and television, should be employed to explain the problems the Plan addresses and its characteristics. Newspapers and posters should be liberally used.

- (b) Incorporating the philosophy and characteristics of the Strategy and the Plan into the process of planned development and economic growth at the national level

Following the educational and information activities of the Plan, each member State should now be in a position to align its policies, practices and strategies with the philosophy and characteristics of the Plan. And the first step in this regard is the deepening and enlargement of knowledge about the national economy. It is impossible to continue indefinitely with incomplete knowledge of the African resources base. In this regard, the assessments made in connexion with the educational and information activities should have laid the foundation for such deepening and enlargement of knowledge.

Recommendation 4: Deepening and enlargement of knowledge about the economy

It is therefore recommended that work must be organized or accelerated in respect of the following:

- (i) Natural resources

Soil: Analysis of soil types and their laboratory testing; preparation of soil maps, including land utilization maps and soil suitability maps;

Water: Inventory of water resources, both surface and underground; hydrological studies of river basins; survey of fishery and other living water resources;

Forest: Inventory of forestry resources, including analysis of plant and wood species;

Minerals: An accurate knowledge of subsoil resources is becoming increasingly imperative for each member State, but in order to conduct a systematic exploration for minerals, it is necessary to undertake the following: preparation of topographical map series, photogeological studies and detailed geological mapping;

Livestock: Survey of livestock resources;

Energy: Surveys of water resources, forest resources and of minerals should have indicated the possibilities for alternative sources of energy. Surveys should be carried out on the possibility of using wind, tide and solar energy.

(ii) Population: demographic and other aspects

Recent censuses in the region should have provided a basis for the analysis of population data in terms of age and sex structure, spatial distribution of population, educational attainment, number and size of households, and occupational categories; information should also be available on the distribution of services such as water, electricity, schools, institutes and universities, hospitals, clinics, maternity centres and recreational and other cultural facilities, and on employment and unemployment and housing conditions. Such censuses should be followed by household surveys, which will not only supplement and make more concrete the information obtained from censuses, but also provide information about consumption habits, income and savings. Any member State which did not participate in the 1970 rounds of population census should definitely participate in the 1980 rounds. Similarly, member States should take advantage of the ECA programme on household survey capability in order to equip themselves for extensive and regular household surveys.

(iii) Food and agriculture

Where this has not been done, every member State should undertake an agricultural census with a view to obtaining information on production (levels and composition) and post-harvest losses; factor inputs (water, land clearance, land reclamation, fertilizers, labour, and machinery, if any); production organization; distribution facilities, including co-operatives, marketing boards and transport facilities; and problems confronting production and distribution, including government policies on prices, credit, subsidies, climatic conditions and management. The following should also be carried out: analysis of activities in terms of contribution to satisfaction of domestic needs; analysis of labour by grades; and analysis of technology used by factor proportions and sources.

(iv) Industrial sector (manufacturing and energy generation and distribution)

The following are required: survey of structure of industry in terms of product and production organization; analysis of factor inputs and sources (materials, energy, capital equipment, machinery, manpower, including entrepreneurial resources, capital and credit); analysis of contribution to meeting domestic needs; analysis of manpower by skills; and analysis of technology employed in terms of factor proportions and source.

(v) Building and construction

It is necessary to undertake: an analysis of construction activities in terms of physical outputs and composition, ownership of businesses, sources of financing, and employment generation; an analysis of employment by grade; and an analysis of the type of materials used and sources, and of the type of technology in terms of factor proportions and source.

(vi) Transport and communications

The following should be carried out: survey and analysis of transport activities by type, output and inputs (fuel, parts, machinery and equipment, manpower by grades); analysis by type of ownership (Government, national private and expatriate private); and an assessment of possible bottlenecks, sources of vehicles, machinery and equipment, including analysis by capacity.

(vii) Distribution

This should be analysed in terms of location, ownership and sources of financing for enterprises, and of factor inputs (equipment, including buildings, manpower analysed by grades and source).

(viii) Health services

Information is needed on types of services available and their spatial distribution, particularly as between urban and rural areas; analysis of manpower by grades and sources (domestic and foreign); the equipment available; the medical and health research facilities available; and the effectiveness of services. The information obtained will provide a check on that obtained from the population census.

(ix) The education system

The following should be undertaken: review and appraisal of the education system in terms of facilities available for different levels of the system (building space, equipment and the teaching staff); analysis of enrolment and output; analysis of output in terms of fields of specialization; assessment of the extent of the involvement of the tertiary level in the solution of development problems; analysis of teaching staff and equipment and materials by source (domestic and foreign); evaluation of the contents of syllabi; and evaluation of the contribution of the informal sector to the provision of the required type of education. The information obtained here should be supplemented by that obtained in the census.

(x) Government machinery and other development support institutions

Whether as the setter of development objectives, the distributor of resources or the regulator of the activities of all the agents of development and economic growth in the economy, modern Governments have become dominating forces in the economy, and hence there is a need to evaluate the efficiency with which their activities are carried out. In this connexion, the activities of the following Government departments and other

development support institutions should be critically examined: the Central Planning Office vis-à-vis its role as the co-ordinator of development efforts; Ministry of Agriculture and its extension services; Ministry of Industry, its extension services, and location policy; Ministry of Trade and Commerce, particularly in relation to the issuing of licences and trade promotion; Inland Revenue Service; Ministry of Mines and Power; Ministry of Transport and Communications; and the statistical services, and research institutes. The monetary, fiscal and tariff policies of the Government should be examined, as also the activities of local government and its institutions.

(xi) Inventory of indigenous technologies

Indigenous technologies, their type and capacities, including institutions and persons producing them, and their problems (manpower equipment and parts, financial and legal), should be surveyed and analysed, as should the effect of improved technology on the domestic production of technology. This should include:

- identification of selected institutions (e.g. railway workshops) as teaching "companies";
- consideration of a national do-it-yourself movement;
- review of existing arrangements and methods for handling imported technology and consideration of a national corporation for that purpose, if necessary;
- survey of indigenous inventions and innovations and consideration of the climate for invention and innovation, including patenting procedures and incentives, with special reference to technologies for rural development, and consultations with African inventors;
- consideration of the role of universities and other third-level educational institutions in invention and innovation, bearing in mind available natural resources and choice of product lines as well as technologies for rural development.

(xii) Structure of the domestic market

This should be analysed in terms of its characteristics, in particular, ownership (national, both Government and private, and expatriate) and degree of competitiveness (monopolistic, oligopolistic, duopolistic and perfect competitive). The following are also necessary: survey and analysis of trade marks, brand names and promotional techniques; study of fragmentation of markets as a result of product differentiation and unnecessarily large numbers of technical design standards, and of market penetration, product substitution and rapid product succession. Some of the information required for the analysis recommended here will have become available under the sectoral studies recommended above.

(xiii) Survey and evaluation of the monetary and financial system

This is covered under the section on mobilization of domestic financial resources given below.

(xiv) The external sector

This calls for the analysis of the following: exports and their destination; imports and their provenance; types of exports and imports in commodity terms so that the inputs into the production of such commodities can be studied in relation to raw materials available domestically; a special analysis of the services sector (banking, insurance, consultancy); payments for education and education services; travel; expenditure on foreign representation and participation in international meetings and conferences; imports of parts, components, etc.; a special analysis of the debt situation, including volume and nature of grants, loans, and direct foreign investment; terms of aid, loans and grants in terms of the extent to which they are tied, period of repayment, interest rates, etc.; a special analysis of technology imports (methods of importation, types in terms of relevance to domestic development needs, terms of purchase, etc.); and a special analysis of technical assistance, including relevance to development needs, contributions, particularly to local costs by recipient governments, and studies on the use of aid and technical assistance in the past.

(c) Changes required in the planning and plan implementation processes

The central focus of the Monrovia Strategy for the Development of Africa and of the Plan of Action to implement it is on the need to change course, as far as the present unsustainable and overdependent approaches to planned development and economic growth in Africa are concerned, as well as on the need to lay new foundations for self-reliant and self-sustaining development and economic growth at the national, subregional and regional levels. Effective planning and plan implementation have a crucial role to play in this task, and the studies and analyses recommended above as aids in deepening and expanding knowledge of the economy constitute the foundation of these planning and plan implementation activities. Such studies should have provided information on the range of materials available in the economy, the gaps between the requirements of the Lagos Plan of Action and existing practices and needs in terms of overdependence on the external sector for a substantial percentage of the factor inputs required (manpower, raw materials, machinery and equipment, unpackaged technology, finance), widespread poverty (low-level of food consumption and poor quality food, lack of or low-level education, lack of or poor housing facilities, poor and badly distributed health facilities) and serious balance-of-payments problems. All these constitute the problems to be solved and call for the participation of all agents of development and economic growth in the economy to determine what courses to pursue in subsequent plan periods.



Recommendation 5: Increased involvement in determining the goals and objectives of the next plan period and how to achieve them

It is therefore recommended that the first task in preparing for planning for future plan periods is the involvement of all agents of production, distribution and research and development in the planning process, where this is not already the case. This calls for the establishment of a strong rapport between the public and private sectors. In saying this, it is important to recall that, increasingly, planning and plan implementation will have to focus on the solution of specific real socio-economic problems (nutrition, skill acquisition, creation of institutions, etc.) which originate from specific sectors and/or institutions, and the specialists in these areas will have to be formally integrated into the process of decision-making in planning and plan implementation (see section I of this document).

The purpose of this involvement of all decision-making agencies in the economy is to determine the goals and objectives in the next plan period in terms of the specific problems to be solved and not in that of a single objective of growth rate of gross domestic product to be achieved. Thus decisions may be taken in relation to certain sectors, regions or groups and within each of them, to certain commodities and services, such as research and development and/or production support services. In effect, decisions at this stage will deal with such issues as the kind of industrial growth, the kind of agricultural growth, the kind of imports, the kind of technology, the kind of educational development, the kind of health programme, the kind of support services, etc. In the context of African conditions, such changes in the composition of goods and services will be in favour of more goods and services of benefit to the lower income categories of the population in order to raise their levels of living and their productivity and to help to generate a broad-based growth structure.

This preliminary decision-making exercise may determine who will produce what and what measures will be used to encourage compliance with the objectives agreed upon: tax policies, credit, subsidies, site allocation policy, etc. Such arrangements will also determine how to pursue the objectives: domestic production as against imports; if domestic production is chosen how the inputs will be obtained: raw materials, machinery and equipment, manpower and finance.

Recommendation 6: Planning the internalization of the factors of production

In view of the new orientation of development and economic growth efforts, it will be necessary to organize formally the "growth" of factor inputs at the national, subregional and regional levels in accordance with the results of earlier analyses. Therefore, while member States will continue to use available factor inputs, supplemented by what can be obtained through trade, aid and technical assistance, it is recommended that measures should be taken to start the process of internalizing the supply of factor inputs. This will include changing the content of syllabi, particularly at the secondary and tertiary levels, the strengthening of existing research and development institutions, intensification of on-the-job training, use of informal arrangements, deliberate creation of new institutions, such as African multinational industrial and mining enterprises, etc., intensification of natural resources exploration and exploitation, deliberate fostering of the spirit of entrepreneurship and development of indigenous technology and technological capabilities, etc.

Recommendation 7: Corporate planning - project analysis and production control

In terms of the imperative need to achieve those objectives that have been agreed, corporate planning, whether in the public or private sector, is a sine qua non. This is particularly so because of the crucial role of markets and marketing and the organization of production and distribution. In addition, in order to make the activities of corporations effective, there is a need to build up manpower skills for project formulation, analysis and implementation, and for production control.

With regard to project analysis capability, it is important to note that all the real objectives and goals of development and economic growth that we have mentioned (participation through employment, income distribution, technology choice, environmental considerations, etc.) are better taken into account at the project level, especially when technology choice, which determines most of them, is being considered. In contrast, production control is concerned with such problems as: (i) forecasts of future sales for scheduling purposes and estimates of costs of new jobs; (ii) receiving orders for products from sales departments; (iii) translation of future schedules into manpower and machine requirements; (iv) determination of finished parts needed; (v) determination of materials requirements; (vi) maintenance of raw materials stock room; (vii) determination of operations required; (viii) determination of machines and machine attachments required; (ix) determination of sequence of operations; (x) making-up of production orders and schedules; (xi) ensuring that all production facilities are available; (xii) assignment of jobs to particular men and machines; (xiii) issuing orders and instructions to produce; (xiv) control of materials transportation in the factory; (xv) receiving reports of work done and evaluation of performance; (xvi) putting design, quantity and schedule changes into effect; (xvii) replanning when original plans are not fulfilled; (xviii) prevention of recurrence of plan failures; (xix) control of finished parts stock and products stock rooms respectively; (xx) keeping sales departments posted on delivery dates; and (xxi) control of finished parts stocks in company-owned warehouses.

It is therefore recommended that member States should organize training in project analysis and that enterprises should establish effective production control departments.

Recommendation 8: Development monitoring system

At the time when the targets to be pursued during the plan period and the measures for pursuing them are determined, it is usually assumed that many things will remain the same. Unfortunately, this is not usually the case. Indeed, unforeseen circumstances can and do arise during the implementation period, which may nullify the goals and objectives of the plan if steps are not taken immediately to deal with the emerging circumstances.

It is therefore recommended that every member State should establish a development monitoring system, or in other words an information system geared to the provision of the data needed for a diagnostic approach, that is, an approach that implies a cross-sectoral, cross-spatial and cross-population examination of the existing development system, an attempt to understand the inter-dependencies involved, and an identification of the main problems and weaknesses, the implicit trends and the main potentialities or opportunities for improvements.

Apart from collecting and using both quantitative and qualitative data to assess development at the local level, the development monitoring service would monitor the social and economic effects of technological change, and would provide an early warning of impending crises. Information from different parts of the country collected through the development monitoring service should be combined with information from other sources (e.g. locality studies by scholars) and used as a basis of regular reporting to the national planning board and to regional (subnational) planning boards where these exist. The service would use simple methods for carrying out its task. It could be based on a series of development observation posts stationed in different parts of the country or operate by means of a series of regular visits by small mobile teams to different parts of the country. The service should also develop mechanisms for monitoring external occurrences that may have effects on the implementation of the plan, such as developments in the world money, finance and commodity markets.

Another task of the development monitoring service should be the development of appropriate indicators of development and economic growth.

With information from the development monitoring service and from the production control departments of enterprises, the central planning office and hence the Government should be in a position at all times to take decision about the implementation of the plan.

Recommendation 9: Research and development, including collection, analysis and interpretation of information

"The problem of information is a vital issue, and any model attempting to portray the economic system has to employ some device whereby information is conveyed." 1/ Hayek 2/ regards the problem as fundamental, remarking that "The various ways in which the knowledge on which people base their plans is communicated to them is the crucial problem for any theory explaining the economic process....." Lachmann 3/ refers to the need to "emphasize the transmission of knowledge, the interaction of minds, as the

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1/ C.S.W. Toor, "The role of information in economic analysis", South African Journal of Economics, Vol.48, No.2, June 1980, pages 115-116.

2/ Hayek, F.A., Individualism and Economic Order (London, Routledge and Kegan Paul, 1949), page 78.

3/ Lachmann, L.M., Capital and its Structure (London, London School of Economics and Political Science, 1956), pages vii-viii.

ultimate agent of all economic processes". Thus the question of information in planning and managing economies has been receiving greater attention in recent years. Of course, the question is not that of dissemination only. There is also the question of generation, collection, analysis and interpretation of information. Therefore, in view of the importance of information to the successful implementation of the Lagos Plan of Action, member States should strengthen existing or create new institutions for social, economic, cultural and technological research, including the collection, analysis and interpretation of statistical and other information, and the development and analysis of appropriate social, economic, cultural and technological indicators.

While the collection and analysis of routine statistics and other information must go on, arrangements must be made for household surveys, agricultural, industrial and distribution surveys and censuses. Finally, users of statistics and other information must take the lead in indicating the statistics and other information they may need, well in advance of the time at which they will be needed.

The role of universities and other institutions of higher learning and of research institutes, whether private or public, is most important in the area of R&D. Some of the information available through these sources will be of great use to the development monitoring system.

Recommendation 10: Review and appraisal of the progress made in the implementation of the plan

There are two main objectives of review and appraisal, namely, to provide: (i) information on the progress made and shortfalls in implementation of a plan, including explanations of both progress and shortfalls as a basis for taking the necessary action to deal with undesirable occurrences; and (ii) a feedback mechanism linked to the planning exercise in the next plan period. Review and appraisal is usually undertaken by all the development and economic growth decision-making agencies, and is co-ordinated by the central planning office. The exercise is carried out in relation to the targets, goals and objectives set down in the plan and the measures for attaining them.

In view of the importance of review and appraisal to the attainment of the goals and objectives of the Lagos Plan of Action, it is therefore recommended that every member State should make such review and appraisal an integral part of its development planning and implementation.

### III. The Lagos Plan of Action and Collective Self-reliance

Because of the large number of small countries in Africa, which cannot on their own undertake viable socio-economic development activities, and of the uneven distribution of natural resources, economic co-operation is imperative. Indeed, while the bulk of the proposals in the Lagos Plan of Action will have to be implemented at the national level, the successful and effective implementation of such proposals for national action may even depend on the manner in which the others are organized and implemented.

#### Recommendation 11: Subregional seminar or conference

Therefore, in view of the potential crucial role of co-operation for the implementation of the Lagos Plan of Action, it is recommended that seminars or conferences on the Strategy and the Plan should be organized within the framework of the MUFPOCs with a view to making member States understand the reasons and arguments behind the Strategy and the Plan and the linkages between the required activities at the national and those at the subregional levels. Seminars or conferences can even be organized at two, three or more country levels.

#### Recommendation 12: Strengthening existing co-operation arrangements and institutions

Action at the national level as well as the seminars or conferences at the subregional or other multinational levels will have revealed the imperative need for co-operation with other countries. It is strongly recommended, therefore, that member States should strengthen existing co-operation arrangements, such as the various economic communities, and existing institutions, such as research institutes, training institutions and joint enterprises in the fields of transport and communications, energy, food and agriculture, etc. As a basis for strengthening existing co-operation arrangements and institutions, each member State should establish a national study group to review: (i) national machinery for economic co-operation; and (ii) multinational organs for economic co-operation with Government participation, with special reference to: (a) terms of reference and constitution of multinational organs in terms of Lagos Plan objectives; (b) balance of multinational co-operation organs in which the Government participates between those performing administrative and secretarial services and those concerned with natural resources, development of factor inputs, production and marketing, or R&D, etc.; and (c) effectiveness of national and multinational organs in cost benefit terms; (iii) study tours to visit selected multinational co-operation organs in selected regions or groups of countries; (iv) review of role of national State trading organizations with a view to: (a) improving effectiveness; (b) encouraging intra-African trade in the light of the Lagos Plan; and (c) expanding functions to include technical assistance to indigenous medium- and small-scale trading enterprises.

The support that will be forthcoming can take a concrete form in the increased use of the services provided by such co-operation arrangements and institutions in the context of the need to internalize the factor inputs, as follows:

(i) Natural resources: Joint requests for assistance in exploration, evaluation and development can be submitted to aid donors. In particular, the evaluation of the potentials of common river and lake basins can be jointly requested because of the present acute problems of food, agriculture and energy. On the other hand, with respect to existing institutions, member States should make greater use of the services of the cartographic and aerial survey services centres, the mineral development centres and the remote sensing centre. Similarly, member States that have institutions whose facilities are not fully utilized should open the services of such institutions to nationals of other member States and should undertake to provide such services free of charge.

(ii) Manpower: In view of the advantages that can accrue from the training of Africans in Africa, member States should intensify their use of subregional and regional training institutions. The use of the services of such institutions could be supported by resources provided by bilateral and multilateral aid donors.

(iii) Finance: Member States should intensify their use of existing clearing house arrangements as such arrangements assist in economizing scarce foreign exchange. Similarly, it will be to the great advantage of all concerned if the practice of some countries of investing in the economies of others could be expanded and intensified.

(iv) On-the-job training and study tours: Since the experience of one African country is likely to be relevant to the problems of others in similar circumstances, African countries should provide opportunities for on-the-job training and study tours to the nationals of others. Such activities can also be supported by resources provided by bilateral and multilateral aid donors.

#### Recommendation 13: Creation of new arrangements and institutions

In view of the felt need for new institutions to undertake: (i) systematic exploration of natural resources; (ii) establish and manage heavy industries; and (iii) promote the development of indigenous capability in the field of science and technology and of high-level manpower for research and development, management, administration, teaching, etc., it is recommended that African countries should establish:

- (i) multinational African enterprises for the exploration and development of natural resources;
- (ii) multinational African enterprises for the manufacture of machinery and equipment for agriculture, industry, energy, transport and communications, etc., based on the raw materials obtained from the region's natural resources;
- (iii) higher institutes of research and training where high-level manpower can be trained and consultancy services undertaken for the benefit of member States; and
- (iv) higher institutes for management training and finance for the training of high-level management, financial and monetary specialists.

One problem with these institutions is the way in which they are to be financed. While this is a real problem, it should not be too difficult to arrange if the institutions are widely dispersed and the national currencies of member States used, supplemented by some foreign exchange from member States and supported by financial and technical assistance from bilateral and multinational donors.

#### IV. Financing of the Lagos Plan of Action

Financing the Lagos Plan of Action was one of the major issues to which the Ministers referred in the Plan of Action which they formulated. In this connexion, the Ministers felt that, as regards the mobilization of financial and real resources, the cost of the total programme could be significantly reduced. This would depend on the choices of technology made and the care with which they were made, since most of the technologies in everyday use all over the world are not subject to property rights; due attention must, however, also be paid to trademarks policy and practice. But more importantly, the Ministers felt that considerable domestic financial savings could be mobilized for reinvestment in plan projects by both conventional and new measures and that, as regards foreign exchange, there was room for savings in outpayments for such services as banking, insurance, shipping, civil aviation, marketing and distribution. Moreover, they felt that account should also be taken of the transfer pricing operations of private enterprises. In all these cases, a close and continual scrutiny of the invisibles in the national accounts is called for. 4/

As we all know, money is the sinews of war and the Strategy and the Plan of Action reflect faithfully the socio-economic war situation in which African countries have found themselves. Money is crucial, therefore, to the implementation of the plan and all necessary measures must be taken to mobilize the financial resources required.

#### Recommendation 14: Mobilization of domestic financial resources

In this connexion, the following steps should be taken to mobilize domestic financial resources for effective use:

- (i) Critical review of company-tax policies (profit tax rates, depreciation allowances, subsidies and other financial incentives). It is now clear that tax holidays and generous depreciation allowances may not be necessary. Similarly, subsidies may sometimes lead to misuse, rather than efficient use of scarce resources;
- (ii) Analysis of pricing policies of enterprises, both public and private, domestic and foreign, with a view to identifying elements which may be responsible for loss of revenue;

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4/ E/CN.14/781/Add.1, pages 6-7, paragraphs 32 and 33.



- (iii) Review and appraisal of the activities of monetary, financial and investment institutions (banks, building societies, insurance companies, co-operatives, unit trusts, pension and provident funds, post-office savings banks, and industrial and other development corporations) with a view to identifying their loan policies with regard to real investment in production and distribution activities; and promotion of the establishment of new savings institutions, particularly in the rural areas;
- (iv) Analysis of the investment policies of all enterprises, both domestic and foreign;
- (v) Review of other tax policies (direct and indirect) and management, including the work of the inland revenue service and the customs department;
- (vi) Flow-of-funds analysis with a view to identifying sources of generation and users of funds.

Recommendation 15: Enlargement and preservation of foreign exchange resources

In view of the low level of expertise and technological development in Africa, foreign exchange is crucial to the imports of skilled personnel and technology needed to make good these deficiencies, particularly in the context of self-reliance. It is, therefore, recommended that the following steps should be taken by member States to enlarge and preserve foreign exchange resources:

- (i) Initiation and/or enlargement of trade with the OAPEC countries. While these countries are rich in oil, they could constitute an important market for the sale of food and agricultural products, including forest products;
- (ii) Negotiation for more direct investment by OAPEC countries in African countries;
- (iii) Negotiation for more grants and soft loans from OAPEC countries;
- (iv) Negotiation for more grants and soft loans from the OECD countries. However, in view of the authoritative statement by the Chairman of the Development Assistance Committee chances of success in this area are very slim indeed;
- (v) A plea either for cancellation of intolerable debt burdens or a moratorium on debt payments;
- (vi) Use of barter, particularly for raw materials. This technique has been extensively used by OAPEC countries and others, and the subject calls for serious and urgent study;
- (vii) Renegotiation of existing agreements with foreign companies; and
- (viii) A serious analysis of the external transactions accounts with a view to identifying those elements of the invisibles account which may be eliminated or reduced and those products for which domestic production may be started.

Recommendation 16: Other measures for preserving foreign exchange

It is a well-known fact that the causes of the balances-of-payments problems of African countries are to be found in the invisibles account, where heavy and continuing payments are made for banking, shipping, insurance and consultancy services, and in the manufactures section, where the payments are for parts and components which could easily be produced in Africa. Unfortunately, the situation has now been aggravated by increasing imports of foodstuffs.

As a result of an analysis of the situation, member States may need to take the following measures:

- (i) Establish at the national and/or multinational levels banks, insurance companies and shipping companies, and institutions for other services, such as marketing and management;
- (ii) Deliberately attach nationals to feasibility project teams financed from multinational or bilateral agency sources as well as by national Governments;
- (iii) Increase opportunities for specialists to participate in courses on feasibility studies preparation run by the IBRD, etc., tailored to meet the requirements of priority sectors, and held either in Washington or, for each MULPOC, in a suitable host country;
- (iv) Encourage the formation of national consultancy groups and national and multinational consultancy groups and national and multinational consultancy associations;
- (v) Promote at the third level of education, multidisciplinary courses relating to feasibility studies;
- (vi) Review the present ADB course, including its impact on the demand for project design and planning consultancy services, and follow this by courses organized at the MULPOC level on an open-ended basis;
- (vii) Support services for the indigenous business sector to enable it to contribute effectively to the implementation of national development plans;
- (viii) Substitute other cereals for wheat in urban areas;
- (ix) Intensify the production of dairy and fish products;
- (x) Establish industries for the production of equipment, instruments, parts and components at the national and multinational levels. Such industries should be managed by African multinational enterprises whose shares will be held by member States;

- (xi) Undertake studies on the transfer pricing operations of transnational and indigenous business enterprises;
- (xii) Reorient, if necessary, the lending policies and patterns of ADB, East African Development Bank and other multinational financial institutions in relation to the Lagos Plan of Action and the expected foreign exchange crisis.

#### V. The Lagos Plan of Action and the Transnational Corporations

The focus of the Monrovia Strategy for Economic Development of Africa and of the Lagos Plan of Action for its implementation is self-reliant and self-sustaining development for African countries. To achieve this objective, African countries are committed to the substitution of internal factors of production and distribution for external ones. Yet, when one examines carefully African economies, one is impressed by the extent to which technology, finance, and manpower resources of transnational corporations dominate the mineral, plantation agriculture, manufacturing, banking, insurance, transport and communications and even distribution sectors of such economies. This is the main reason why it has been thought necessary to devote a section, however small, to the relationship between the Lagos Plan of Action and the transnational corporations. Indeed, to achieve the long-term objectives of self-reliance, self-sustainment and sovereignty over natural resources, strategy of medium- and long-term nature to deal with the role of the transnationals is called for: measures to maximize the benefits and minimize the costs of the presence of the transnationals in African economies and measures for gradual substitution of internal factors of production for external ones.

When we talk about transnational corporations, we should not forget that we are talking about an 'animal' whose origin is no more confined to the industrially developed countries of Western Europe, North America, Japan and other Asian countries and Eastern Europe. The developing countries already have their own transnationals whose corporate behaviour is likely to be just as aggressive and pragmatic as that of the enterprises from the "North" when competition in international markets and negotiations with developing countries are the issues. However, it has been claimed <sup>5/</sup> that in terms of better use of domestic labour, capital, and raw materials and positive contributions to external transactions, the developing-country transnationals are better than those from the industrially-advanced countries. Such claims have got to be justified for each country and that task is one of those to be undertaken by the transnational corporations unit recommended below.

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<sup>5/</sup> Peter O'Brien, The New Multinationals - Developing-country firms in international markets, Futures, August 1980, pages 303-316.

Recommendation 17: Understanding the activities of the  
Transnational Corporations

In this connexion, it is recommended that, where it has not been established, member States should establish a transnational corporations unit to be based in the Central Planning Office and staffed with an interdisciplinary team of corporate lawyers, economists, engineers, financial experts, etc., to undertake the following:

- (i) organization with the relevant sectoral ministries and private sector institutions of studies on the activities of existing transnational corporations with a view to understanding their role in the economy as investors, technology transferor, revenue and employment generator; supplier of high level skills for management, marketing, scientific and technological services as well as their impact on the external transactions of the country;
- (ii) collect and analyse on a regular basis information on new transnationals as well as current information on the activities of the existing transnationals;
- (iii) prepare periodic reports on the activities of the transnationals for consideration by the relevant authorities; and,
- (iv) study and analyse new conditions for accepting transnationals into the economy and advise the authorities accordingly.

Recommendation 18: Substituting internal factors of production and  
distribution for external ones

The planned development of human resources has been stressed throughout this paper as the basic means of achieving the goals and objectives of the Lagos Plan of Action and even as an end in itself. This aspect of the Lagos Plan of Action is so crucial to relations with the transnationals that action must now be taken for the purpose of training the right calibre of high level manpower. Therefore, it is recommended, where it is not already the case, that the following actions should be taken:

- (a) organization, on a permanent basis, of courses on negotiations. It is interesting to note that even in the advanced countries of the West and the East, this is now a subject that is officially recognized as important to the extent that courses are organized either in universities or under other arrangements; we have to understand that the game cannot be played to our mutual advantage if it is only one side who knows the rules;
- (b) negotiation of the process of management integration. In entering into any agreement with any transnational corporation, (i) a plan should be drawn up jointly by representatives of the government and of the transnational on what the manpower needs would be for skilled technical and professional personnel over an agreed period of years; (ii) a rough assessment be made of the availability of employees wholly or partly qualified, of those in training, and of competitive openings; and (iii) an agreed plan of steps be made by which nationals would be assisted to obtain appropriate education

and training in schools, colleges, institutes, etc., and on-the-job, such that over the agreed period - with allowance for possible fall-out and failure - nationals would take on all of the technical, managerial, marketing and policy functions originally agreed. This is one of the areas that the Unit for Transnational Corporations has to monitor regularly; models of the arrangement recommended already exist in some African countries;

- (c) the emphasis of the Lagos Plan of Action on the development of heavy industries - metal and chemical - is meant to accelerate the process of internationalization of the factors of production. Hence, all member States must take immediate steps to implement this aspect of the Plan. So also is the need to establish immediately programmes and projects for "growing" the right type of high level skills based on an accurate knowledge of the natural resources base. This will require the reform of the content of existing syllabi in some cases and the establishment of new courses particularly in science and technology, management, finance, etc., in others; and,
- (d) but more important is the need to initiate and implement action at the multinational, subregional and regional levels in the development of the required skills. Similarly, actions are necessary particularly in the fields of monetary and financial services through the creation of investment banks, insurance and re-insurance companies, consultancy companies and shipping companies. Member States should also use the services of such regional and subregional institutions as the African Regional Centre for Technology, African Regional Centre for Engineering Design and Manufacturing, the Higher Technical Institute for Training and Research, the subregional mineral development centres as well as the cartography, survey and mapping centres not only to upgrade the capabilities of existing staff but also to increase substantially the quantity of such staff.

## VI. Sectoral Guidelines

A few sectoral guidelines dealing with food and agriculture, industry, human resources development, and the environment are attached as annexes to this document.

## VII. The Role of International Development Institutions

### (a) The role of international institutions in general

Throughout this document it has been repeatedly indicated that the major responsibility for the implementation of the Lagos Plan of Action rests with the member States. It is they who wear the shoes and know where they pinch. Nevertheless,

a great deal can be done by international development institutions to aid the smooth implementation of the Plan, for a number of reasons:

- (i) International development institutions constitute a huge collection of expertise in all areas of socio-economic development;
- (ii) Such a collection of expertise embodies experience from different parts of the world;
- (iii) These institutions have been created jointly by a group of member States and therefore usually enjoy the advantage of foreign exchange resources; and
- (iv) The institutions have multidisciplinary teams so that their activities are becoming increasingly relevant to the complex problems of development in the developing countries.

In the context of the foregoing, therefore, international development institutions can and do play the role of generator of new ideas, of adviser on technical issues and of financier. However, for any country to benefit effectively from the resources and services of these institutions, it must possess its own personnel capable of meeting the officials of the international development agencies on equal terms. Moreover, such national officials must be clear in their minds about their problems and what help they want from the agencies in solving the problems, otherwise their problems and the solutions to them will be interpreted according to the wishes of the officials of the agencies. And as the Ministers have said, there is "... the possibility of the Plan slipping into the hands of others so that the region's Plan becomes their plan, its purposes and objectives, their purposes and objectives, its agencies and instruments, their agencies and instruments, its inputs, their inputs, and the results it seeks, the results they seek". 6/

It is in the light of the foregoing that such great emphasis has been placed on action at the national level and, as part of that action, on the development of human resources. Once that has been achieved, member States should have no difficulty in identifying the type of problems they want to solve, the external assistance they will need and when they will need it.

(b) The specific role of the Economic Commission for Africa and its secretariat

Mention has already been made of the role of the Economic Commission for Africa, as represented by its Conference of Ministers of Development and Planning, and of its secretariat as the initiators and promoters of the idea of a new development strategy for Africa. The Commission and its secretariat have been able to play this unique role because of the multidisciplinary nature of its secretariat and because it is the centre for general social and economic development for Africa within the United Nations system.

Any effective implementation of the Plan will depend very much on the retention of its central feature: the openly-recognized interlinkages among the sectors and the problems to be solved within them. Thus, as designed, the development of the agricultural sector is organically linked to that of industry, since the industrial programmes and projects will produce the fertilizers, equipment and implements needed in agriculture, while agriculture as part of the natural resources base will produce the raw materials for industrial development. An old-fashioned sectoral approach to the implementation of the Plan will therefore be extremely harmful, so that the importance of the central and guiding role of the central planning ministry or office cannot be overemphasized.

It will be observed that the guidelines provided here are centred around two activities: (i) clarification of concepts and ideas; and (ii) research as the basis for action. The first will enable member States to understand the nature of the Plan and to accept it as theirs, while the second will assist them in getting to grips with the situation and will sustain them as the implementation of the policies, programmes and the projects in the Plan gathers momentum. In both activities, the Commission and its secretariat, as the centre for general economic and social development for the Africa region, the co-ordinator of the activities of the United Nations system within that region, and the provider of leadership <sup>7/</sup>, can play a catalytic role. Thus, assistance can be given in the organization and management of the national, subregional and regional seminars or conferences, particularly through the MULPOCs under the guidance of the headquarters secretariat. Similarly, in collaboration with specialized agencies, assistance can be given in the organization and management of the sectoral and/or functional workshops. Next, as far as the studies, analysis, reviews and appraisals are concerned, the secretariat of the Commission is well placed to take the lead in organizing them. Further, since the implementation of the Plan is to be monitored at all levels and the results of the monitoring at one level fed into the next, the secretariat of the Commission is inevitably committed to playing an important role. In addition, not only must reports on the review and appraisal of the progress in implementing the Plan be submitted to the MULPOCs' Councils of Ministers, the Conference of Ministers of Development and Planning, the Assembly of Heads of State and Government of the Organization of African Unity but also, as a consequence of its recent resolution, <sup>8/</sup> to the General Assembly of the United Nations.

Finally, as an executing agency <sup>9/</sup> of United Nations Development Programme projects and other projects in its own right, the Commission and its secretariat are well equipped to assist member States in identifying and analysing various projects and in implementing them. In fact, quite a number of projects included in the Plan are projects which the Commission and its secretariat have identified, analysed and are helping to implement. It is important also to note that the activities of the Commission and its secretariat have been stepped up in recent years, thanks to the United Nations Trust Fund for African Development, to which member States are the leading and major contributions on a voluntary basis.

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<sup>7/</sup> United Nations General Assembly resolutions 32/197 and 34/206; decision 35/440 and document A/35/546.

<sup>8/</sup> United Nations General Assembly resolution 35/64.

<sup>9/</sup> United Nations General Assembly resolution 33/202.



## ANNEX I

### Some Sectoral Guidelines

#### I. Food and Agriculture

As the food and agriculture situation and problems differ from one country to another, the first step is for governments to examine how the proposed priorities and suggested action programmes apply in the context of the concrete situations of their own countries. Therefore the exercise could be looked at from three perspectives, namely:

##### 1. Review of all existing activities at the National Level in the Food and Nutrition Sector

This is essential as a stepping-stone to a critical appraisal of all food and nutrition programmes. After the appraisal, specific priorities will have to be established and projects that are not meeting the greatest emergency needs in the area of food and nutrition will have to be discontinued to release funds and resources for projects and programmes meeting and contributing towards increased food self-sufficiency. These priorities are clearly listed within the Lagos Plan of Action as follows:

- (i) reduction of food losses;
- (ii) improved food security;
- (iii) increased food production of both food crops, livestock and fisheries through increased rural incomes and improved price policies that create an incentive for food production;
- (iv) forestry production (including control of erosion and desertification);
- (v) agricultural research in the relevant areas; and
- (vi) agricultural extension services.

Action in this area could be undertaken through a co-ordinating body using the facilities of local as well as international consultants in the agricultural field with the cheapest and most effective possible means. In this connexion, local universities and research institutes could be mobilized into a consultative group which will review and critically appraise on-going governmental projects in the area of food production and nutrition along the lines suggested above. It is envisaged that this exercise should not last for more than 4 months and the reports once accepted by the government might be submitted to ECA and FAO for information and comments. This will in the first instance indicate governments' area of priority action in their interpretation of the Lagos Plan of Action.

## 2. Establishment of National Task Force for Food and Nutrition

The task force is to co-ordinate activities of all ministries, institutions and all international organizations - multilateral and bilateral - concerned with food and nutrition problems in the country. The task force should be given the mandate and full responsibility for immediate and effective increases in food availability throughout the country. For the effectiveness of the task force, the following guidelines are proposed:

- (i) an immediate increase in the national budget allocated to agriculture, without which there can be little effective action;
- (ii) a commitment that, henceforth, a substantially increased proportion of all foreign aid (loans and grants - ODA) would be invested in the food and agriculture sector, at least for the rest of the decade. This will minimize the diversionary tactics and salesmanship from some donors. Consequently, donors genuinely concerned with improvement in Africa's economic situation will be well informed of governments' priority as these can only be easily recognized after member States themselves reflect consistency in their statements, resolutions and requests;
- (iii) effective trade liberalization at national, subregional and regional levels must be vigorously pursued. To this end, it is imperative to resolve categorically and immediately on free movements for all food and agricultural raw materials within the region;
- (iv) ways and means should be found for generating improved responsiveness and action should be taken to implement previous relevant proposals, programmes and projects at both the national, subregional and regional levels;
- (v) (iv) above has to go hand in hand with effective pricing and fiscal policies in favour of the agricultural sector, both in the short and long runs, without which resource allocation in the private sector may reflect inconsistencies and impede programme cohesion;
- (vi) furthermore, as a basic principle, a rapid expansion of integrated small-scale village-level agro-allied processing on a massive scale is conducive to improved food preservation and increased production. This policy will clearly assist in improving farm-gate value-added of farm products, increasing farm income and rural employment, and thus laying the foundation for rural transformation; and,
- (vii) payment of subsidies as may be necessary to assist farmers has to be determined on the basis of priorities.

Action in this area should be undertaken simultaneously with the first proposal and should include assistance from the international agencies under the proposed Strategic Review Mission whose terms of reference are contained in the attachment.

3. Monitoring Implementation

This will be at two levels (national and international levels) in relations to the reports of evaluation teams: At the national level, it is essential that a quarterly or biennial report of not more than two pages on each major, repeat major top priority project, should be prepared and submitted to the Task Force group. The report must be terse, concise and useful in the sense that it must include areas of achievement, areas of failure, and recommendation for improved implementation. At the national level annual reports must be prepared by each Government on its effort for transmission to ECA and FAO. The report should give concise information on a project by project basis within the context of the priorities listed in the Lagos Plan of Action; the relevant information must include a year by year programme of activities that governments have set for the implementation of priority areas including achievements and constraints being faced.

ATTACHMENT

Strategy Review Missions: Terms of Reference and Composition

Purpose

The purpose of the Strategy Review Missions is to advise governments on the adoption of appropriate policies and institutions, as well as the determination of priority areas for programmes in the field of agricultural and rural development with focus on increased food production, improved self-sufficiency and food security.

Duties

In general terms, the Missions will undertake the following tasks:

- (i) review existing policies and programmes in the fields of agricultural and rural development with a view to assessing their impact on improved food self-sufficiency and food security;
- (ii) assess the major constraints - economic, physical, technical and institutional - as well as the possibilities for increased food production and improved agricultural and rural development;
- (iii) in the light of the above review and assessment, determine the priority areas for short- and medium-term action, discuss with the government the need for possible adjustments in existing policies and programmes and indicate the broad implications of such adjustments in terms of resource allocations (domestic and external);
- (iv) identify priority areas for new programmes and projects and indicate possible needs for further technical and financial assistance in the formulation and appraisal of such programmes and projects;
- (v) any other relevant tasks agreed upon in consultation with the government.

Composition

The composition of the Missions could be limited to the provision of expertise in policy and programme analysis, in rural development, including expertise in finance and resource mobilization, and if so required, also in one or more technical fields such as land and water development, crop production, livestock and fisheries.

The exact composition of the team will be determined in consultation with the government concerned. The Strategy Review Mission will be fielded by FAO and ECA at the request of any member State.

## ANNEX II

### Industry

#### 1. Incorporation of the concepts and ideas of the Lagos Plan of Action in the framework of national development goals and objectives

The implementation of the industrial programme part of the Lagos Plan of Action should begin with the incorporation, as appropriate, of the Plan's concepts and ideas into the framework of national perspective, long- and medium-term development goals. In this connexion, an important point of departure will be the identification of the indigenous productive capacities which, if created, would enable individual African countries gradually to meet, from within, their changing domestic basic needs and key development inputs requirements.

In view of the importance attached to the domestic production of inputs into food and agriculture, agro-industries, energy generation and transmission, transport and communications, mining and small-scale industries, the product lines of interest to member States will be of the following groups: (i) mining and processing of iron ores, copper, bauxite, basic chemicals, petroleum and gas; (ii) key intermediate goods industries, e.g. iron and steel, copper products and aluminium, ammonia, phosphoric acid, pharmaceuticals and other basic chemicals and building materials and selected areas of mechanical and electrical engineering industries, including spare parts. These will of course be combined with consumer goods.

The knowledge of the major product lines a country expects to produce over the medium- and long-term as well as the quantitative targets in material terms, when combined with a commitment to produce the desired output, utilizing indigenous agents of production as much as possible, would enable the country to determine the raw material needs as well as intermediate products; the scope of its management and skilled manpower requirements; orders of magnitude of the financial investment requirement at least for key products as well as the scope of technological and design capabilities to be developed.

#### 2. Indigenous Private, State and Foreign Investors

The implementation of the programme will largely depend on the goals, behaviour and capacities of the agents of industrial production and distribution (which in the region comprise indigenous private, state and foreign investors), and incentives offered to them. Hence, depending on domestic conditions, and utilizing the relevant experiences of other Third World countries, it is recommended that measures be taken to enable state and private enterprises produce the products enumerated above.

(a) State Enterprises

With respect to state enterprises, it is recommended that they should be run on commercial basis with the right to hire and fire and possibly with some equity shares by workers as incentives.

(b) Foreign investors and entrepreneurs

The high capacity of foreign investors and entrepreneurs is well known. Moreover, these investors have preference for specific types of projects; their perception of risk and uncertainty in Africa is high; and they have preference for short-term investments and are sometimes engaged in restrictive practices. To accommodate them, alternative options include (i) careful study of areas of their preferences to determine possible areas where they can contribute effectively to the industrialization process without stifling indigenous enterprises; preparation of guidelines for joint ventures in the context of indigenization programmes; and determination of incentives to correspond to benefits.

(c) Medium- and Small-scale industries

In the area of medium- and small-scale industries both in urban and rural areas, indigenous private enterprises and/or cooperatives have the potential for making the greatest contribution to the development of industry. Therefore, to reduce the risk and uncertainty associated with entry into areas of production, and where they have not been done, steps should be taken to identify and support new indigenous potential entrepreneurs, assist them to make industrial investment decisions and provide them with operational support in terms of choice of product lines, choice and ordering of equipments; search for and mobilization of financial resources for raw materials and equipment; advice on marketing and provision of industrial operational manuals in both official and local languages through, e.g. national investment promotion institutions; and establishment of profiles and preparation of feasibility studies at nominal fees.

3. Preparation of Industrial Projects

The inadequate facilities and costs of formulating and preparing industrial projects restrict the volume of industrial investment. Therefore to assist indigenous industrialists, each member State should create a national consulting engineering corporation with branches in rural areas to serve to accelerate industrial development. The services of such a corporation and its branches would include project preparation, formulation and design of projects, including compilation of project profiles, feasibility studies and guidelines on operation techniques. Appropriate fees would be charged to clients, starting with a nominal fee and the rest of the cost paid when the producer has successfully started operation.

4. Industrial Premises

The cost of industrial premises is one of the factors which inhibit potential small producers from engaging in industrial production. To improve this situation, it is recommended that member States, which have not done so, should embark on planned construction of industrial premises taking into account the supply of water, electricity and other utilities. The use of local materials and of community self-help efforts will reduce the costs of such premises. The industrial premises could be rented to individuals and/or cooperatives.

5. Choice of Technology

When foreign investment dominates industry as has been the case in the Africa region, the choice of technology and its costs in terms of technical fees have always been determined by the foreign management according to their whims and caprices. To change this situation, it is important to formulate a national technological plan and programmes as an integral part of development plans. In addition, it is proposed that, depending on the expected growth of indigenous enterprises, member States which have not done so should (i) create, initially, one national technological corporation which will, on behalf of its clients - mainly indigenous private, cooperative and state enterprises - search, evaluate, and negotiate for the purchase of technology licences and equipments; and (ii) establish, depending on the potential domestic demand, one or two development corporations to commercialize indigenous technologies and new products as well as prototypes for carefully selected product categories. The corporation will also sell technical know-how to local industry, design, undertake installations and test-run.

6. Domestic Production of Spare Parts

The use of spare parts and maintenance of equipments serve to lengthen the useful life of equipments and lack of them reduces the life of equipment and increases imports. To improve the situation, it is recommended that member States which are not already doing so should reduce, by legislation, the variety of imported equipment and parts and local assembly; promote standardization; tie local assembly to domestic production of spare parts by local companies undertaking local assembly. There is experience in the region in this area.

7. Role of Government Expenditures

Government expenditures constitute significant portions of all expenditures in any economy. This purchasing power can be and has historically been used to stimulate the growth of specific branches of industries. Therefore, where it is not yet the practice, it is recommended that member States should use the method of allocating certain shares of purchases for small- and medium-scale enterprises and enact



procurement laws that will favour small- and medium-scale industries. Such measures may need to be supplemented by a rationalization programme aimed at upgrading equipment, financial support, standardization, quality control, and efficient organization of marketing, possibly through a small-scale industrial development and marketing corporation.

#### 8. Collective Self-Reliance

The implementation of the industrial programme section of the Lagos Plan of Action will definitely require the pooling not only of raw materials but also of markets, human resources and institutions. In this connexion, it is proposed that each member State should establish, within appropriate government structures, facilities for the promotion of intra-African investment in joint ventures especially those for raw materials and intermediate goods production and equity participation by other African countries in national projects with payments in products and/or barter trade; the joint use of training institutions; and the establishment of trading enterprises to promote the sale of products of joint ventures. To achieve these objectives, measures will have to be taken to reform domestic trade and distribution, including the control of internal distribution by indigenous businesses with all that that implies in terms of credit, management and marketing training, etc.

### ANNEX III

#### Human Resources Development

In order to accelerate the development of human resources, it is recommended that member States should concentrate on the following:

1. Undertake biennial or triennial manpower surveys to identify needs and gaps.
2. Evolve a national human resources development and utilization policy and strategy, along the basic principles of the Lagos Plan of Action, as an integral part of overall national development plans.
3. Evolve appropriately staffed national machineries for:
  - the periodic assessment of manpower needs and planning of manpower supply and training in accordance with the natural resources of the countries and the goods and services to be produced from such resources, giving attention to management marketing needs, etc.
  - the co-ordination and promotion of training policies and programmes and development of a cadre of Training and Staff Development Officers;
  - the mobilization and administration of funds for training - both overall and sectoral;
  - vocational and educational guidance service; and,
  - to support a Central Advisory Council for Human Resource Development and Utilization, including Personnel Training.
4. Consolidation and integration of fellowship and scholarship policies and programmes and their orientation to manpower and development needs.
5. Reform of educational and training systems to achieve more effective response to the challenge of development, including requirements of skills, knowledge and innovative attitudes to work and development.
6. Reform of administrative and management systems in both public and private sectors, to make them results-oriented and to be able to cope effectively with development challenges of the 1980s. This should include a more commercial orientation of public enterprises which could be used to forge inter-African multinational enterprises.

7. Adoption of dynamic programmes of mass literacy and adult learning through both formal and non-formal systems of education and training with the aim of developing enlightened and more knowledgeable workers.
8. A policy of employment promotion, particularly for school leavers with programmes integrated in various sectoral production and distribution activities. This should include policy and programmes for the development of indigenous entrepreneurial capability for job creation.
9. Support for multinational, subregional and regional training institutions and fellowship programmes particularly in specialized manpower development fields that complement the programmes of national institutions; and
10. Evolve measures (e.g. installation grants on first appointment, assistance in accommodation, provision of educational, library and laboratory facilities, recognition of experience gained abroad, etc.) to induce qualified nationals now working outside Africa to come back home.

The overall strategy and policy objectives that each member State should endeavour to pursue on a sustained basis are: (i) the development of national capability for effective manpower training and utilization; (ii) promotion of employment and income growth for increasing numbers in the work force; (iii) co-operation and collective self-reliance in training institutions building and utilization; and (iv) integration of human resources development programmes in national overall development plans, with such programmes deriving from the skills, knowledge and labour inputs of the production and distribution sectors.

## ANNEX IV

### Environment and Development

In view of the increasing importance of environmental considerations in the development process, it is recommended that each member State take measures to:

- (i) Incorporate the objectives and goals of the Lagos Plan of Action in the environment field into the national legal framework by enacting the relevant laws, ordinances and regulations;
- (ii) Define realistic policy options in order to incorporate environmental considerations into the national development plans;
- (iii) Establish a National Environmental Secretariat at the highest possible level (if this has not already been done) to co-ordinate the various strategies and programmes that are being developed by the various Ministries for solving sectoral environmental problems which are already described in the Lagos Plan of Action;
- (iv) Strengthen the legislative and law-enforcement branches to review existing environmental laws and establish new laws as the need arises, especially for the control of exploitation of natural resources for sustained economic development;
- (v) Establish a National Bureau of Standards to set up national environmental health criteria and the levels of chemical pollutants (including solid wastes) from industry and agriculture in the air, soil, water and in the marine environment (in co-operation with ARSO and WHO);
- (vi) Strengthen the National Standards/Analytical Laboratories and identify research institutions and university laboratories to monitor pollutants in the air, soil and waters to protect the human environment;
- (vii) Create and enhance public awareness for the protection of the environment through the use of environmental education programmes in the national news media so that concerned citizens can help the government to keep in constant review the state of the environment in the country;
- (viii) Develop the necessary environmental manpower at both the middle-level technician stage and the research scientist level through undergraduate training at institutions abroad and within African universities; strengthen national institutions to hold environmental in-service training for government officials at regular intervals and organize international workshops for environmental research workers; and,

- (ix) Review the terms of reference of various national licencing boards, agencies and corporations responsible for promoting economic development relating to large-scale agricultural projects, mining exploration and exploitation, fisheries, forest exploitation, agro-based, metallurgical chemical and mining industries, so that the environmental impact of their activities can be taken into account at the project analysis and formulation stage before it becomes too late and generally more expensive for remedial action.