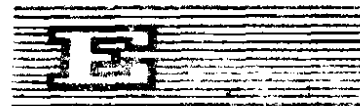




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IMPLICATIONS AND GUIDELINES TO THE IMPLEMENTATION OF  
THE HUMAN RESOURCES DEVELOPMENT AND UTILIZATION  
PROGRAMME OF THE LAGOS PLAN OF ACTION

## I. Introduction

### A. The Lagos Plan of Action - What it is and how it evolved.

The Lagos Plan of Action was adopted in April 1980 by the first Economic Summit of the Assembly of Heads of State and Government of the Organization of African Unity, which was held in Lagos (Nigeria) from 28 to 29 April 1980. It is a plan designed by Africans to foster cooperation and action at national and regional levels for the implementation of the Monrovia Strategy for the Development of Africa. By the plan African States formally and collectively declared themselves ready to wage a battle against poverty and economic dependence and to reinforce political independence with economic self-determination. This was in line with the earlier African Declaration on Cooperation, Development and Economic Independence<sup>1</sup> of May 1973. Essentially and for the first time in African economic history, the Lagos Plan of Action (LPA) sought to reverse the existing concepts and strategy of development in the region, away from export-import-foreign exchange orientation engineered by external stimuli to development to a strategy of internally generated self-sustaining factors of growth and development, requiring the use of local resource endowment for the production of goods and services to meet the basic needs and other requirements of African citizens. In other words, African States now want to use their own natural resources for the attainment of economic independence and self-reliance and to reduce their current overdependence on other regions.

The LPA evolved by stages as follows:

- The series of global international meetings on the world economic situation and the resulting Declarations of Algiers (1974), Lima (1975) and Dakar (1975) for example, have called for the establishment of a New International Economic Order. The call for reform in international economic relations received sanction at the Sixth Special Session of the United Nations General Assembly in April/May 1974 when the Assembly adopted a Declaration on the Establishment of a New International Economic Order. As a follow-up developing countries initiated further global meetings during 1975 through the Non-aligned Nations, UNCTAD and UNIDO. It was at the meeting of the Non-aligned Nations in February 1975 in Dakar that a consensus was reached on concrete proposals for transforming the New International Economic Order from rhetoric to reality through the reform of the rules and norms of the present international economic system.<sup>1/</sup> In this concerted effort, the developing countries were demanding fairer prices for their raw materials, a fairer distribution of global income, transfer of technology and a fair share in the distribution of power in international economic institutions. From the resulting experiences of global dialogues African States became increasingly aware of their disadvantaged position which warranted a special effort to improve. This started off a process of re-examination of Africa's development strategy.

- In 1976 ECA Executive Committee adopted a Revised Framework of Principles for the Implementation of the New International Economic Order in Africa which was subsequently endorsed by the Assembly of Heads of State and Government of the OAU in June 1977.

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1/ Roger D. Pansen: A New International Economic Order? an outline for a Constructive US Response, Overseas Development Council, development paper 19.

- Late 1978, a Colloquium on Perspective of Development and Economic Growth of Africa up to the Year 2000 was held in Monrovia (Liberia). The colloquium critically examined Africa's development concepts and strategies and called for Africa's self-reliance and authentic approach to development. This was followed in February 1979 by the Addis Ababa Seminar on Alternative Patterns of Development and Lifestyles for the African Region.
- In Rabat (Morocco), 20-28 March 1979, ECA Conference of Ministers of Economic Development and Planning considered the preceding declarations, the outcome of the Monrovia Colloquium and the Addis Ababa Seminar as well as the Revised Framework of Principles for the implementation of the New International Economic Order in Africa and, in consequence, adopted a Development Strategy for Africa for the Third Development Decade. It was this same strategy which was subsequently tabled before the Assembly of Heads of State and Government of the OAU in Monrovia in July 1979 which yielded the Monrovia Declaration of Commitments on guidelines to follow and measures to be taken for the achievement of national and collective self-reliance in Africa. It was this commitment that converted the Rabat Development Strategy for Africa into the Monrovia Strategy for the Development of Africa.
- In April 1980, the LPA, as already mentioned, was adopted during the Lagos Economic Summit, thus providing the modalities for the implementation of the Monrovia Strategy for African Development.

The adoption of the LPA came as a result of the frustrating experience with the results of the sustained development efforts and of development concepts and planning approaches during the 1960s and the 1970s. There was growing disillusionment over past practices and prevailing characteristics of African economies. As summarized in an ECA document, 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 remained 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<sup>1/</sup>

The Monrovia Declaration of Commitments spelt out both the priority objectives of development and the modalities for their attainment. The LPA went further in elaborating sectoral and inter-sectoral objectives and the modalities for attaining the Monrovia Declaration as follows:

- a) establishment and implementation of large-scale, long-term programmes of human resources development and achievement of a good measure of self-reliance in trained manpower as input to economic activities in all sectors;
- b) strengthening of existing sub-regional and regional institutions for training and research;
- c) strengthening and servicing new forms of cooperation among African States such as cooperation in all fields, particularly in training, mineral resource exploitation, trade and finance;

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1/ Implementation of the Lagos Plan of Action - Some Proposals and Recommendations for the Guidance of member States, ECA document E/CN.14/20, page 3.

- d) development of science and technology to meet the requirements of the Lagos Plan of Action with special reference to national policies and programmes in science and technology for development within the context of overall national development plans;
- e) taking appropriate national and collective action in terms of policies, budgetary and financial allocations, and international negotiation measures to support the above commitments and the overall objective of attaining viable and meaningful economic independence.

Each of the above measures and particularly the objectives and production and service targets set for the various sectors of African economies requires very substantial inputs of trained manpower, skilled and semi-skilled operatives, technical personnel, supervisory and managerial personnel at all levels, instructors and teachers, specialists in a variety of disciplines as well as a good crop of indigenous entrepreneurs. Other input factors such as capital, technology and raw materials are equally needed as co-operants. In respect of human resources elements such as the will to develop, to improve one's social situation through industry and positive attitude to work and to make sacrifice at individual and national levels in support of economic and social development are particularly critical to qualitative manpower input.

Chapter IV of the Lagos Plan of Action outlined the main problems and constraints in the field of human resources development and utilization as well as spelt out strategy options and action programmes that will ensure the effective realization of planned objectives and targets in other production and service sectors of African economies. The full text of the chapter is reproduced as Annex I of this paper.

Chapter IV by itself does not cover the full scope of the manpower and management requirements for the full implementation of the LPA. It is therefore necessary to examine the needs of each sector covered by the plan. Abstracts from the plan, indicating the manpower and management skill-gap or deficiency, as well as specifically expressed training and management capability needs for plan and programme implementation are reproduced in Annexes IIA and IIB.

#### B. The purpose of the current Guidelines

The object of this paper is to provide a brief background to the evolution and *raison d'être* of the Lagos Plan of Action as has been attempted in the foregoing pages, and principally to provide guidelines for a better understanding and appreciation of the issues involved, the requirements and need for sustained action in respect of human resources planning, development and utilization, including the related field of development administration. The elaborations that will now follow will by no means cover all the implications and requirements for human resources development and utilization. Rather it will attempt to draw attention to problems, raise issues, suggest alternative policy and programme options and modalities for action, ask numerous questions with the aim of stimulating local thoughts and possible action for the adaptation of the basic elements, principles and policy objectives of the LPA to suit national needs and for subsequent incorporation in national development plans. Essentially the guidelines aim at

"nationalizing" or localizing the LPA in respect of the human resources sector and at encouraging implementation action. It aims at creating an awareness in public servants and social leaders that the development and proper utilization of human resources holds the key to economic development and social advance in Africa. Consequently, this paper is addressed to African policy makers, planners, administrators, educators and trainers, training and research institutions, leaders in public and private enterprises as well as to other African and non-African organizations, professional associations and institutions concerned with assisting African States to develop and mobilize the region's human resources for the attainment of self-sustaining, internally self-generating and integrated economies.

## II. General Implications and Guidelines for Human Resources Development and Utilization, including administrative capability

A start in providing operational and planning guidelines to Chapter IV of the LPA may be to ask some obvious questions: human resources and administrative capability for what? What types and levels? When and where needed? What are the supply sources? The modalities outlined in the plan itself summarily answered these questions. Africa needs increasing quantities and improved quality of trained manpower at all levels and of varying types to make possible the realization of planned development targets in each sector covered by the LPA. The objective is ultimate self-reliance in all types and levels of trained technical, supervisory, operational and managerial personnel, including teachers, instructors, researchers and services specialists in every field. Reducing and ultimately eliminating dependence on foreign expertise would ensure full utilization of Africa's own expertise.

### Public Education

A priority need is to ensure broad-based participation in the implementation of the LPA. This presupposes that the groups that are expected to participate in implementation action have full knowledge of the content and action requirements of the plan and already know the role they are expected to play. Hence the need for public education about the LPA for politicians, policy-makers, planners, educators, employers, labour leaders and workers. It is the duty of the government to use its machinery and agencies in providing this necessary public education. The use of the mass media through series of articles in the press; radio and television addresses and demonstration of what is being done to implement the plan; conferences, workshops and seminars for appropriate interest groups and professional associations, should all be considered and planned. A special approach needs to be made to post-secondary educational institutions to ensure that they are partners in a national effort to make education more functional and development oriented, to build into their course programmes elements that will produce a sense of loyalty and of national commitment to industry and positive attitude to work. What amount of this public education has been done thus far and what are the obstacles to doing so? Have there been any effort at the national level to print the LPA and use it for public information and as an instructional material in universities and polytechnics on courses in development with a view to developing a change of mind from the old order of economic dependency to a new order of gradual move towards economic self-reliance?

### Manpower Planning

Chapter IV of the LPA as well as the manpower and management components of the other sectors covered by the plan have given broad programme ideas of the manpower implications as well as the challenge for producing the manpower needed for the implementation of the whole plan. For an understanding of the magnitude of this challenge and of the required manpower input, one has to start with an assessment of the needs in relation to available manpower and other resources. Annexes IIA and B are examples of such an assessment on a broad basis. This requires further refinement and quantification. It is a function of manpower planning and programming of immediate and future training requirements. Every enterprise, department, ministry, organization and institution would need to be involved in assessing its manpower requirements. It is within the context of this role that everyone needs to study the LPA to derive therefrom what guidance it gives for manpower development and human resource mobilization in a manner that will ensure productivity and efficiency.

Appropriate national machinery is needed for human resource planning and for promoting and coordinating programmes and policies for human resource development, including the development of administrative and managerial capabilities. Such a machinery could be a ministry, a self-accounting manpower secretariat or a division of a planning ministry or Ministry of Finance. Assuming every African State already has such a machinery, attention would need to be given to its operational effectiveness and capability for coping with the much larger task of manpower development for the attainment of economic independence and ultimate self-reliance in trained technical, managerial and entrepreneurial personnel. To enhance effectiveness, one should consider the staffing and functional scope of the machinery, its ability to guide users and trainers of manpower, its authority in the power structure of government, its financial resources, its orientation, its relationship with parastatals and its ability to communicate with, and secure the cooperation of the private sector in personnel development questions.

In the public service set-up it is necessary that some machinery should see to recruitment, assessment of public service manpower needs and the training and motivation of personnel. A Ministry of Establishments may be entrusted with its role. Here again, the question of effectiveness and scope of responsibility needs consideration. Motivating public servants in favour of higher and efficient performance and a spirit of public service is critical. To what extent are public servants today doing an honest day's job and putting public interest and the interest of the underprivileged population above private gains?

Both the national machinery for overall human resources planning and the Ministry of Establishments need to work together to evolve and harmonize long-term manpower development and utilization policies and training programmes. What is the real problem today? Is it one of over-fragmentation between planning ministry, establishments, labour and finance ministries? Is there sufficiency of coordination and policy harmonization at ministerial and cabinet levels? Is there anywhere in the national machinery or in Human Resource Development and Utilization Council where representatives of private individuals, professional associations, labour organizations and employers associations share in the responsibility for determining national manpower policies and training priorities?

### Institutional Capabilities

Institutional capabilities for human resources development through education and training constitute another requirement. Having determined needs and shortcomings in skills, know-how and attitudes, local training, research and educational institutions are needed to implement planned training programmes. Questions such as how much training is needed? Who needs to be trained and where? What type and level of specialist education should be offered? To what extent can existing educational institutions be reformed, overhauled and re-oriented to deliver educated persons with required knowledge and functional skills? All these questions come to mind for consideration. A country may wish to find out whether it can finance, maintain and fully use all its institutional infrastructure for training and research. It may need to determine where economies of scale are needed where it might need to specialize in local institutional facilities while cooperating with other African countries in sharing the use of its own as well as other African countries' specialized training and educational facilities. Are countries maximizing cooperation in this area? Have they taken the trouble to undertake full inventory of their post-secondary vocational, professional and technical training facilities in their home countries so as to foster intra-African cooperation in identifying where to train and promote effective TCDC in human resource development?

The LPA in respect of various sectors has identified existing and new institutions for development on multinational, sub-regional and regional basis through cooperation. These institutions are particularly crucial in developing technical and scientific capabilities as well as indigenous manpower resource for the exploitation of Africa's rich natural resources and for the production of goods and services. To what extent do these institutions which initially received unanimous support in the resolutions establishing them, later receive the political goodwill, financial support and effective use of every African government? Why are many countries indifferent to the difficulties facing institutions that were specially established to train their personnel and enhance their administrative and management capabilities? Are the training and research programmes of these institutions sufficiently relevant to solving Africa's development problems and if they are why is support for these programmes difficult to attain?

### Funding of Training

Lack of funds constitutes a major constraint of African intergovernmental and regional training and research institutions. African States are very lax in paying up their financial contributions in support of multinational and regional institutions. When membership has been subscribed to and the will to cooperate in utilizing the facilities of the institutions exists, bureaucratic procedures have too often delayed payment of national contributions for too long. What are the arrangements at the national level for ensuring regular and prompt payment of contributions to regional training institutions? How effective are the payment arrangements and can these be improved? Are the contributions to various regional institutions concerned with human resource development coordinated effectively or dispersed sectorally and can the arrangements be rationalized?

The funding of training ensures that resources will be available for the implementation of training and manpower development programmes. The issues to consider are: How is training funded at the national level and who pays or should pay the training bill? Is the training fund assured and adequate in the light of the immense training programmes required under the LPA? Is there a statutory obligation for employers to contribute to the training fund and how effective is the management and utilization of such fund? What alternatives to a training levy should be evolved to cater adequately to massive scale training of the workforce, particularly at the middle and higher levels? What is being done to encourage the private sector to provide adequate resources for personnel training, particularly the training of indigenous personnel? Is there a tax incentive to ensure the funding of training? Do ministries and departments have adequate resources for training and should these institutions and parastatal enterprises contribute to national training fund? Is the management of the training fund efficient and sufficiently serving its purpose? If there is no national Training Fund, why should there not be one and how can the constraints to the establishment of such a fund be eliminated?

Resources for personnel training can be enhanced through bilateral and multilateral technical cooperation. Besides direct grants for the establishment and expansion of educational and training institutions, funds are indirectly made available for training through fellowships both for local training and training in the home countries and institutions of the donors. The issue for consideration is how effective is the utilization of these additional resources in training nationals in priority areas of manpower needs, in skills and experience acquisition critical to the implementation of the LPA programmes, production targets and supporting services? Is there effective planning, administrative capability and clearly articulated policy to ensure the efficient utilization of technical cooperation assistance in the field of human resources development that will ensure ultimate self-sufficiency in trained manpower? How effective is the cooperation between different agencies of government responsible for technical cooperation and development on the one hand and education and training on the other to ensure that technical cooperation in respect of human resource development is in accord with the objectives of the LPA.

Trade agreements, as an area of technical cooperation, are insufficiently utilized as a means of getting nationals trained. This also applies to major contracts for construction, management services and consultancy work. Are the officials who negotiate these agreements and contracts sufficiently aware of the training benefits they can insist on having written into them at virtually no extra costs to the country? The use of counterparts, attachment training for practical experience for students, on-the-job learning for nationals, obliging transnationals and foreign investors to train a given number of nationals over and above their own needs as an additional condition for granting concessions, all need to be fully exploited for training. What amount of technological skills are African countries getting in return for their huge trade deficits with Japan for example? The opportunities for indirect training of nationals by exploiting conditions for trade and contract agreements are immense and need to be fully utilized.



### Private Sector Training

Private enterprises in African countries have for long depended on the government to do the major investment in education and training for their open market recruitment of personnel, and on foreign sources for the supply of technical, managerial and supervisory personnel at middle and higher levels. Is it not a high time that they become substantially involved in the training of the personnel they need? An approach to this increased involvement is through contributions to national training fund as already discussed above. While transnational companies have frequently established training programmes and institutions to serve their own needs, indigenous enterprises hardly invest in training. What can be done by associations such as Chambers of Commerce and Industries to develop training programmes through private sector cooperation in providing opportunities in the establishments of their members for in-plant practical training of students of engineering, technology and management? What lessons can be learnt from Latin America and Asia regarding the role of the private sector in initiating and operating large-scale vocational training programmes for employees engaged in agriculture, industries and services?

### Priority Areas for Training

While all types and levels of trained manpower are needed and should be provided, limitations in financial and institutional facilities for training make it mandatory that some priority areas be determined. This would have to be in relation to the priorities established by the Monrovia Declaration of Commitments to African Development, namely: regional self-sufficiency in food; establishment of a sound industrial base; physical integration of the African region; development of capabilities for exercising effective control and sovereignty over the region's natural resources; establishment of mutually beneficial and equitable relations among African countries; and substantial increase in the share of intra-African trade. In consequence, priority would have to be given to manpower development and training in respect of natural resources inventory and exploitation; food production, food preservation and processing; industrial development and exploitation of raw materials for industrial processes and products; all modes of transportation and communications; administration and enterprise management; trade development and promotion; and education as a supplier of trained manpower. If this priority setting is agreed then the question is to determine the specific requirements of knowledge, skills, know-how and attitudes in respect of each priority sector, sub-sector and development programmes and projects. The manpower inventory and training needs assessment considered earlier is expected to deal with these specific requirements. Has this been done? Are the priority development sectors fully knowledgeable about their critical manpower needs and is anything being done to meet these requirements?

### Work Environment

In addition to good education and training, fair remuneration, fringe benefits and motivation, people need a conducive work environment to be able to perform at their best. Work environment in this context refers to both the physical and social environment in which work is performed, the physical facilities for job performance, and the rules, regulations and procedures governing the conditions of work. Should any of these factors become a constraint or source of

disinterestedness the productivity and efficiency of the person involved would tend to fall. Consequently, in the development and utilization of human resources adequate attention would need to be given to environmental influences in the place of work.

Work environment depends to some extent upon the nature of work to be performed and the level of the persons performing specific functions. Normally, certain minimum environmental convenience are provided for various jobs. One environmental situation may be more conducive than another while other situations may constitute a constraint to efficiency. Besides physical facilities, rules and procedures for the discharge of functions contribute to easing or complicating work environment. Although these are man-made, it is necessary to ensure that their operation are constructive and do not constitute elements of disconcertive and frustration. Thus in the effort to enhance performance capability through manpower development and training, those concerned with personnel management and manpower utilization would need to be concerned with questions such as: Whether the work environment is healthy and free from occupational hazards? Whether physical facilities provide minimal comfort for the optimal effort of the employees? Whether existing rules and regulations for the performance of functions add undesirable elements and unnecessary strain and stress to efforts? In short, good human resource management policy requires that attention be paid to the development of employees and to creating for them a healthy environment for the discharge of their duties, including the maintenance of excellent human relations among peoples in all ranks and operational units of any organization.

### III. Sub-sectoral Implications and Guidelines

It is necessary to go beyond an overall view of the implications and manpower development needs of the LPA and also pay attention to the requirements and constraints at the sub-sectoral level. Here again, the guidelines that follow will take the form of questions drawing attention to problem areas, policy issues and the need for action. The consideration in this section of the paper will cover labour and employment, education, administration and management, and public finance.

#### (i) Labour and Employment

In the field of labour and employment, the critical issues confronting Africa are the low quality of the workforce in terms of productivity and attitude to work; the shortage of skills and specialized manpower; increasing unemployment among educated youth and serious underemployment in rural areas; and increasing level of dependence on foreign skills and know-how. The task which the LPA has engineered is the full and effective mobilization of Africa's human resources for the national development efforts. With population growth rate averaging 2.5% annually, securing employment for all adults able and willing to work becomes a monumental task. Training provides quality to the labour force and considerable attention was given to training in the preceding section. Coupled with the population pressure is the high cost of African labour in general when considered in relation to their job performance and daily output.

Some problem areas to consider are: Why has it been difficult to really have successful and wide-spread application of labour-intensive investment programmes in both public and private sectors? Why is domestic labour comparatively so expensive? What socio-cultural or socio-economic factors condition the prevailing apathy among public servants? To what extent are workers' education and workers' organizations being used to induce more positive job attitudes and higher productivity? Is it more wages or more fringe benefits and social security facilities that are required to motivate the average worker and public servants? What role can labour leaders and trade unions play in this and in ensuring workers' effective cooperation in the struggle against ignorance, disease and abject poverty?

### The Brain Drain

Africa's manpower situation is one that should avoid serious leakages in the labour market and manpower supply pipeline. The "brain drain" phenomenon is now endemic in Africa - millions of uneducated and educated African living and working abroad outside their home countries. Africa can ill afford to lose to the developed countries the services of an engineer, a doctor, a nurse, a teacher, a technologist, an educator, or even a technician, a secretary, or a skilled operator. This notwithstanding, several thousands of qualified Africans are today resident abroad and working to improve the standards of living of themselves and of their adopted countries.<sup>1/</sup> The causes of the African "brain drain" are fairly well known: political victimization; civil war resulting from political conflicts; search for better educational and research facilities; inability to secure at home jobs appropriate to narrow educational specializations; ineffective machinery to encourage the return home of nationals living and working abroad.

Regarding this long existing problem, what is known about the national "brain drain" in terms of who are the "lost brains"? What are their skill characteristics and where can they be found? What policy and programmes have been established to induce lost nationals to come back home to contribute to the cause of national development? Are the policies and programmes effective in terms of results? Where lie identified weaknesses in the structure of the machinery, in policy options or in the personnel that administer the measures? What can be done to improve the effectiveness of national machinery, policy and programmes for reversing the "brain drain"?

### Employment

Concerning school leaver unemployment, is the real source of problem the irrelevance of the type of education acquired, the wrong expectations about jobs, or social constraints and attitudes? Have sufficient efforts and resources been devoted to designing job opportunities and development projects that can utilize the type of educated persons available in African economies, including choice and adaptation of technology to facilitate substantial increases in employment? Is the root cause of the problem partly due to lack of functional education and training or faulty planning options and development strategy?

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1/ Estimates by well informed sources indicate that some 40,000 qualified Africans from Africa South of the Sahara, are resident and working in Europe alone!

What new areas in services, agriculture and industries should be given more attention in order to create increasing volume of work and enhance a higher rate of women participation in the labour force? What wage and income policies should be considered to ensure greater job satisfaction and improves welfare among workers? Can developing African States afford the level of social security and welfare services that is not sufficiently backed by increased productivity? Is the Labour Ministry as presently structured and with its present terms of reference and staffing, properly geared to meeting the problem of attitudinal alienation and lack of a keen sense of commitment now prevailing among the labour force?

### Quality of Life

The ultimate goal of socio-economic development is the improvement of the quality of life - enabling everyone to have better standards of living. Improved quality of life enriches the quality of labour and raises life expectancy; and as such it enhances capability to perform and to attain a higher level of productivity. Comprehensive human resources development objective must therefore include policies and programmes in social welfare and social security. These measures range from health care, housing facilities, nutrition and other social measures and amenities aimed at reducing or eliminating the causes of social tensions in work situation and in social relations particularly in urban communities. Assurance that the State or society will provide for old age can reduce anxiety in middle age as retirement period draws nearer.

What is being called for consideration in respect of the quality of life is that human beings as producers are not machines. They have their own feelings, worries and care; they need maintenance and renewal; bringing them together in a work situation gives rise to particular social problems just as their isolation from others in a community creates other types of social problems. If they are to perform at their best, not only is it necessary to provide them with appropriate working tools and conducive work environment, but also care should be taken to ensure a rising quality of life. The latter requirements may be provided for through social development programmes but those responsible for human resources development should be interested in knowing that the required social services and amenities and social security measures are available and are being efficiently administered and that their provisions are adequate for the maintenance of rising standards of living.

### (ii) Education and Training

A great deal of reference has already been made to education and training in Section II above. For the present the concern will be education as a supplier as well as a consumer of trained manpower. Knowledge, skills and attitudes that are crucial in the development process can be acquired through education. In this regard the structure and delivery capability of the education system, the quality of its staff resources, the content of the subject-matter taught and courses offered, as well as the judicious mix of academics and functional skills requirements are of paramount importance in the preparation of manpower for development and socio-economic and technological transformation. These elements take new significance as a result of the manpower and employment challenge posed by the LPA. A question immediately arising from this situation is the extent of the adequacy and relevance of prevailing educational systems, course offerings and course content in each of the three levels of education in order to adequately meet the challenge and requirements of the LPA.

### Reform of Education

It is therefore necessary for a closer examination to be made of existing educational structures, course offerings, subjects taught, programme orientation both for quality and quantity, as well as the quality of the teachers. Where there are identified deficiencies it would be necessary to initiate appropriate reform measures in respect of: educational development objectives and policies; the orientation of education to the socio-economic needs of the society and community served; reform in curricula and teaching methods; reform in the management of the education systems itself; in the sharing of responsibilities between school management, school authority, the teachers and the taught. The desired reforms should aim at helping Africans regain their lost self-confidence, their cultural identity and creative mind.

A review of institutional capabilities should be made of the capabilities of existing secondary and post-secondary educational institutions in order to determine whether in the light of the requirements of the LPA, some of the existing institutions have become irrelevant and consequently need to be scrapped or over-hauled. The review may lead to new areas where new institutional capabilities should be developed. Where these are very specialized training and research institutions it would be necessary to determine whether they should best be developed on national, sub-regional or regional basis. In this regard consideration could be given to fostering intra-African cooperation and the TCDC principle in developing and utilizing the facilities of specialized institutions. The development of institutional capabilities for formal education should also make room for using the same facilities for non-formal education aimed at mass attack in the acquisition of knowledge and functional education.

### Teachers

Teachers and instructors serve as agents of change and of implementation of educational and training programmes. Their influence on their students and pupils in terms of character formation, attitude cultivation and knowledge acquisition is immense. Basic problems which too often adversely affect their contributions are: the predominance of a high proportion of untrained and unqualified teachers who are made to teach; and poor remuneration and low social standing of teachers; and the growing tendency among many teachers to share their interest these days between classroom teaching and outside money-making activities.

If the educational and manpower programmes are to be effective adequate attention would have to be given to teacher/instructor development. A country that opts to rapidly expand its educational facilities at any or all educational levels must first consider the teacher and instructor components and costs of its option. Where a country has to establish new educational and training institutions in order to train the manpower required for national plan implementation, provision must be made not only for the teaching and research staff but also for a whole range of administrative, management, supervisory, accounting, clerical, catering, and other support staff, all of whom must themselves be adequately trained.

### Education and Vocational Guidance

In both education and employment there is the need for educational and vocational/career guidance and counselling. This is a service that needs to take account of the manpower and occupational requirements of the LPA. Educational planners and manpower planners are expected to provide for long-term policies and programmes of human resources development and utilization. In such planning task there is need to take into account the job aptitudes of individuals pursuing different courses of study and training. To ensure that both individual and national employment interests are in harmony action needs to be taken to inform both students and job seekers what jobs are available now, will be available in the near future of three to five years and so facilitate individual choice of fields of occupation whose potentials are closest to the individual's ambitions, skills and aptitude. Similar guidance is necessary to enable individual employee prepare for career growth in his or her chosen vocation.

What we need to know is the existence of a national machinery for the provision of vocational/career and educational guidance and counselling, the effectiveness of such a machinery, the adequacy of its resources and the effectiveness of the methods and means used to get employment information to those who need it. Effectiveness criterion will extend to the cooperation existing between the manpower authority, educational institutions and employers of labour in order to be able to provide good indications of future patterns and trends in occupational and manpower development. The LPA provides the occupational guidance and counselling services personnel an opportunity to enrich their services and encourage students to orient their occupational interests to critical areas of future manpower demand.

### (iii) Public Administration and Enterprise Management

In both the public sector and in private enterprises the capability to initiate development ideas, plan, execute and evaluate development projects and manage investments lies with administration or in the private and parastatal sectors with management. Similarly, and with particular regard to the translation of the objectives and strategies of the LPA into national development objectives and strategies, applying these skills to evolve concrete development projects and implementing these projects require substantial administrative capability and managerial skills at all levels of government, both central and local. These capabilities operate through and in peoples and within established organizational structures, procedures, rules and regulations. The effectiveness, relevance and efficiency of these structures and procedures and of the men and women who run them in the public service, in the public sector and private sector enterprises, in the last resort determines the rate of implementation of the LPA and the realization of its objectives.

### Governmental Structures

A first consideration is to examine which structures of government at central and local levels or of an enterprise will be used to carry out what developmental task or business functions; to review the adequacy of such structures and the need for necessary adjustments, overhaul or total replacement. The review would involve the extent public and private fonctionnaires are fully conscious of, and knowledgeable about their duties, the specification of these duties, the determination of skills needed for their effective performance and the provision of on-the-job and off-the-job training to correct skill deficiencies.

A further re-examination of the management challenge of the LPA may reveal new areas where public capabilities for effectively dealing with them are lacking and therefore call for the establishment of new administrative units. This may be the case in respect of science and technology for development, energy, environment and development, human resources, economic and technical cooperation, women and development for example. The specialized nature of these new areas demand that administrators and managers responsible for their development must have specialized professional or technical training. Where structures already exist for taking action in the new functional areas, it is necessary to enquire about their effectiveness, awareness of their role and responsibilities, and the relevance and efficiency of their procedures.

#### Personnel Planning and Management

Human resources planning, development and management is critical in the mobilization of public sector capabilities for development. Besides overall manpower planning at the national level, more detailed general and sectoral manpower planning and training programming is required in the public sector. This calls for periodic surveys of personnel needs, identification of skill deficiencies, efficient management of staff recruitment and staff deployment and utilization, including a system of remuneration, motivation and incentives to foster positive job attitudes and a keen sense of accountability and integrity in public officers. Some pertinent questions in this regard are: Whether prevailing personnel management policy and practices sufficiently motivate public servants? Whether training accords with national and agency development objectives? Whether public servants, including politicians, are sufficiently public spirited and genuinely committed to the cause of development and the improvement of the lot of the disadvantaged segments of the population? Are the existing resources of public servants too old fashioned to be reoriented to the new economic order for Africa or can some of them still be converted and what are the methods and means for doing this?

#### Development Attitude

In the development of personnel for the public sector account has to be taken of the type of new and technically complex jobs that they are being called upon to execute under the LPA. In addition to knowledge of subject matter in their fields of specialization and professional training in administration or enterprise management, they would need to be development oriented. This requires that they acquire the appropriate development philosophy, concepts and practical skills that are in accord with the objectives and strategies of the LPA. In this regard they must become fully committed to, and promote the object of ultimate economic independence for their home countries and for the region as a whole. In designing their formal pre-service as well as in-service training, this development attitude must be appropriately built into educational and training programmes.

The public sector is required by the challenge posed by the LPA to play not only the role of policy-maker, planner, implementor, incentive dispenser, promoter, negotiator, but also of entrepreneur. The public sector is expected to play an increasing role in the national effort to exploit natural resources and exercise sovereignty over them. It has a role to play in giving entrepreneurial leadership to the private sector both in transferring economic control to indigenous hands and in reducing any adverse influence of local transnationals. In the area of intra-African cooperation and joint ventures the public sector could play a significant role in acting as public agency for the operation of African multinational enterprises.

### Materials Management

Considerable attention has been devoted to governmental structures and the human element involved in the operation of structures, procedures and arrangements for development administration. An aspect of the latter function which deserves attention is materials management. The importance of materials management will be recognized when due account is taken of the size of national resources devoted to the purchase and import of machinery, equipment, raw materials and other stock needed for the implementation of development projects and for the provision of essential services. The administration of these materials - ordering, shipping and transportation, inventory, store keeping and supplies, constitute major management tasks. The more intensive the national development effort, the more the importance of materials management involved, both in terms of the management of purchasing, stock and supplies and the amount of financial resources involved. Thus as the implementation of the LPA will demand increasing material inputs so will procurement and supply management services in African States deserve more attention and care.

Unfortunately, not much attention has been given to procurement and supply management in the public sector of most African countries. The personnel responsible for the service is frequently not given proper recognition and role in decision making and in status and remuneration. Equally there has not been enough concern over the waste of public funds resulting from the mismanagement of supply contracts, inefficient management of stores, over-inventory and careless handling of expensive materials. It is therefore necessary to review existing policies, structures and arrangements, including the personnel in employment for the management of public purchasing and supply services with a view to eliminating sources of inefficiency, corrupt practices and waste in public spending.

Accordingly, procurement and supply management services in the public sector should review their role and functions in the light of the increased role assigned to the public sector in the implementation of the LPA. Such a review should aim at ways and means of securing enhanced integrity and efficiency in their employees, effecting economies in public spending, and the elimination of avoidable waste. Some of the measures may include staff training, professionalization of procurement and supply function, cooperation with other African countries through intra-African trade and formation of subregional and regional associations of government services dedicated to promoting efficiency, economy and avoidance of waste in public procurement and supply management.



### Maintenance Management

Equally deserving attention is maintenance management in public investments. This refers in particular to public works on which scarce foreign exchange have been spent out of the development budget, computers, office equipment and machinery, public buildings, departmental vehicles etc. It is not uncommon that considerable efforts are devoted to purchasing these capital items while apathy prevails in their maintenance to ensure optimum life and service. Thus for want of a screw nail expensive machines may be allowed to go out of use. What is needed is to treat maintenance function as important as, or perhaps more important than, purchasing and installation of new machinery; to provide resources for maintenance management in the budget; to have trained personnel provide needed maintenance services; and cultivating a more positive attitude of regard for the use and care of public property.

### Training of Public Servants

If public servants, including those running public enterprises are to effectively play the various roles expected of them under the LPA, they must be sufficiently conscious of their tasks, be intellectually, professionally and attitudinally attuned to their new functions. This requirement also pose a challenge to public service training institutions and to other institutions which provide programmes for their orientation. In this regard attention should be given to the relevance and adequacy of courses in public administration, or development administration, public enterprise management and public policy making. The teachers of these courses themselves need reorientation within the framework of the LPA so that they can in turn appropriately reorient their students.

For African public services to maintain the level of efficiency required in rapidly transforming economies in terms of technology and industrialization, there should be continual review, renewal and strengthening of governmental machinery and public sector change agents. This means administrative reforms and management improvements on planned, sustained and systematic basis. The necessary instruments and policy guidance for such review and renewal must be built into, and internalized in every planning and executive organ of the government. The same applies to the management of public enterprises.

### (iv) Public Finance

In line with the goal of ultimate economic self-reliance, the effective mobilization of financial resources and their efficient deployment for the implementation of socio-economic development is basic in any effort aimed at achieving economic independence. Resource allocation through budgetary planning and management would have to give due cognizance to the priority of priorities spelt out in the Monrovia Declaration of Commitments to Development Strategy for Africa. Accordingly, budget planning, revenue collecting and tax administering officials would need to be familiar with what the development priorities are and to appreciate their financial resource needs so that appropriate provisions can be made.

### Resource Mobilization and Management

Efficiency and productivity in resource mobilization through direct and indirect taxation and the efficient administration of the use of these funds will go a long way to ensure that African States will become less dependent on external financing. This is particularly important in a decade when all indications point to dwindling foreign capital in-flow, particularly development assistance grants. It is therefore necessary to find out whether existing machinery for domestic resource mobilization, for tax administration and management of public funds are efficient and not suffering from any apparent leakages. In this regard the adequacy and relevance of the training of revenue and budget management personnel, their work attitudes and sense of duty and integrity would need to be re-examined. As in other areas of public management, skills, attitudes and integrity can be improved through training and professional orientation. Whatever the effort it is the devotion of the man or woman who translates tax laws into practical application, collects revenue, dispenses tax incentives and tax exemptions, allocates funds and controls public spending who counts the most - the human factor. Hence, the necessity to ensure that all he does is not just compliance with financial rules and budgetary procedures, but that he performs his functions in furtherance of national development goals and targets.

It is expected that very close working relationship will exist between the ministry responsible for overall development planning which has responsibility for coordinating action for the implementation of the LPA and the ministry responsible for public finance management and resource mobilization. This is necessary to ensure that development priority and resource allocation priority are consistent and mutually re-inforcing. It is therefore necessary to review how this relationship and cooperation works in practice and what the areas are for effecting improvements.

In an effort to attract foreign investments African States have evolved liberal tax incentives and other exemptions. At the regional and sub-regional levels these liberal offers have tended to be competitive and net returns on their application are somewhat in doubt. It is therefore necessary to review these tax exemptions for their costs and benefits, to exchange ideas with neighbouring States regarding their application and to explore the possibility of intra-African cooperation or sub-regional basis in order to harmonize tax incentive policies and maximize their net benefits.

### Waste in Public Spending

Waste in public spending is widespread in Africa. More efficient utilization of the available financial resources through efficient programme budgeting and adherence to development priorities will facilitate the achievement of development goals. Similarly, better and sounder financial management practices could make available resources achieve greater results. Attention should therefore be directed not only to exploring new areas for the imposition of taxes but also to making sustained efforts to identify and plug leakages in public financial management, including public expenditure control.

(v) Conclusion

The foregoing analysis and outline of possible line of action have attempted to draw attention to various aspects of the manpower and management issues in the implementation of the LPA. Essentially, the analysis focused on the human factor input for the realization of the objectives and targets of the plan. The analysis is by no means comprehensive; it is largely indicative, meant to provide a lead-on to further probing of the human resource requirements of the LPA and to explore ways and means of meeting identified requirements to that lack of executive capacity and capability and apathy among workers will not forestall the full and effective implementation of the plan. If the analysis of issues and the questions posed by the paper should throw some light on the requirements and need for local action, and should lead the reader to investigate the issues and problems further with a view to finding suitable solutions to local situations, then the purpose of the paper would have been fully realized.

In concluding this paper it is necessary to recall that the overall policy objectives in the human resource sector which each member State should endeavour to pursue on a sustained basis are the following:

- (i) the development of national capabilities for effective manpower planning, development and utilization and for development administration, including the mobilization and efficient management of resources;
- (ii) promotion of employment and income growth for increasing numbers in the labour force;
- (iii) cooperation 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 management know-how inputs required in the production, distribution and services sectors of African economies.

THE LAGOS PLAN OF ACTION FOR THE IMPLEMENTATION OF THE MONROVIA  
STRATEGY FOR THE ECONOMIC DEVELOPMENT OF AFRICA:

CHAPTER IV. HUMAN RESOURCES DEVELOPMENT AND UTILIZATION

The Summit takes note of the situation in the development and utilization of human resources in Africa, principal of which are the high rate of population growth, the growing level of unemployment and underemployment, the shortage of different types and levels of trained manpower, the high level of adult illiteracy, the deficiencies in educational system and the lack of co-ordinated policies and programmes of manpower training and the funding of training at the national level. It also notes the various recommendations of the regional training development conference that was held in Addis Ababa in December 1979, aimed at providing specific guidelines for achieving development oriented educational and training systems.

Recognizing the need to achieve increasing measure of self-reliance in the economic and other spheres, the Summit stresses the importance of trained manpower as input to activities in the various production sectors and support services as well as in education and training sector as producer of skills and know-how for its own needs and for other sectors.

The need for increasing employment and income as a way to achieving better living standards for the bulk of the population particularly for the rural inhabitants is stressed. To this end, it is necessary to give adequate attention to the development of indigenous technologies and methods of training that will benefit those in the production sectors at all levels, particularly in the informal sector.

Since Africa's greatest asset is its human resources, full mobilization and effective utilization of the labour force (men, women and youth, both trained and untrained) for national development and social progress should be a major instrument of development.

The importance of scientific and technical skills and know-how for modern development cannot be overemphasized. It is in this area that member States are overdependent on imported technical and scientific manpower. It is therefore very cardinal and in accordance with the principle of self-reliance, that member States should give special priority to the development of scientific and technical manpower at all levels, including the training of science and technical teachers and instructors.

A primary objective of socio-economic development is the improvement of life for the entire population of a nation. The attainment of this objective requires full participation of all segments of the population in gainful and productive employment and provision of all essential services for enrichment of life of the community. It also requires effective programmes of social welfare, community development, social security, and mobilization of the masses for development of public works and community services.

Regarding the immensity of the task of training to be accomplished, lack of training facilities in some fields and scarcity of financial resources, the Summit urges meaningful co-operation among member States in developing and utilizing specialized regional, subregional and multinational training and research institutions for training nationals in specialized skill areas, using wherever possible, existing national institutions as a base. While co-operation and collective self-reliance should be the guiding principles in human resource development, the Summit stresses that the principal responsibility for manpower training and employment promotion should be seen as resting squarely at the national level.

The foregoing highlights of the African situation draw attention to serious manpower and employment constraints in major sectors of development. The situation calls for action, determination and sustained efforts commensurate with the challenge of manpower development that faces member States, if they are to achieve self-sustained, internally self-generating socio-economic development. This challenge calls for hard options and difficult choices. There is need to re-align development priorities in order to emphasize the development of human resources not only as the object of development but also as the custodian and mentor of socio-economic development; as services of all the development as well as of the terminal products and services of all the development efforts. The human resource development sector in Africa requires positive action, if it is to play its proper role in ensuring the continent's survival and progress.

To ensure that member States achieve a good measure of self-reliance in trained manpower and technical know-how; that the skill input into production and service activities in the various sectors are assured and available as and when needed; and that member States have adequate policy and programme guidelines in this important sector, the Summit adopts the following programme of action:

A. At National Level

The translation of public pronouncement at international meetings into national action programme through:

The integration of manpower planning and programming functions, personnel development, placement and utilization services into a Ministry of Manpower Development charged with the responsibility of:

- (a) undertaking realistic manpower assessment, projections, planning and programming and continuous monitoring of its development and proper utilization.
- (b) developing a career capability for co-ordinating and planning manpower development effort and monitoring manpower placement and utilization on a continuous basis.

Establishing and operating definitive and comprehensive policy guidelines for national training development and legislative acts that not only legitimize national commitments to human resources development but also establish and delineate the co-ordinating authority and functions of the following:

(i) Operational Training Administrative Guidance and Co-ordinating Machinery with a proviso for its manning by:

- a profession oriented Training/Staff Development Officer cadre deployed at the centre and in all centres of socio-economic activity, with established career and definitive scheme of service, and one that derives its satisfaction from its own inner standards of excellence and commitment to the development of its field of practice-training development, and supported by:
- sectoral/ministerial advisory committees in sectoral centres of socio-economic activity or service rendering agencies.

(ii) Maintaining a centrally administered Training Fund that ensures steady availability of funds to operate the training function and contributed to by all those that demand and use trained manpower.

Establishing and operating a Central Advisory Council deriving its membership from sectoral committees, and charged with training development and utilization so as to ensure a timely availability of trained manpower and its proper utilization advising on priority skill needs and judicious utilization of available training resources.

Ensuring that multinational-regional-subregional project activities, related to human resource development and utilization are incorporated in and reflected in national policy guidelines, related legislative acts and development plans.

e.g.(a) Multinational or Subregional Graduate Schools being reflected in national University Charter and Education Acts.

(b) Appraisal of national employment policies providing for shared use and co-operative exchange of African expertise.

Establishing, operating and periodic review of training and development programmes, laying emphasis on those with multiplier effect, with priority to:

- (a) Science and technical teacher training;
- (b) Training/staff development officer training;
- (c) Managerial/executive and supervisory cadre development training;
- (d) Accelerated skill development programme in selected and key sectors for industry, agriculture, transport and communications, science and technology, education, integration of women in development based on:

- (i) Task analysis and subsequent employable skills training modular approach;
- (ii) Double in-takes or other cost-saving alternatives in post-primary educational institutions;
- (iii) Non-formal programmes in adult learning through Distant Teaching, University of the Air, Workers Education etc.;
- (iv) In-plant industrial training, teaching factories and development project attachment training.

Periodic appraisal and review of educational policy, training and practice: institutional and staff capacity and capability; and the reform and re-orientation of curricula, course content and course offerings in a response to changing patterns in assessed future manpower demand.

Consolidation and integration of fellowship and scholarship programmes and financial resource for training under one agency within a ministry so as to ensure that:

- (i) the available resources are directed towards meeting the most critical training needs so as to facilitate placement for study in areas that are not locally or adequately provided for;
- (ii) the recipient country or agency is able to determine by itself the fields in which donors are to provide institutional and financial resources for training;
- (iii) efficient and more equitable use is made of the available resources for these areas with critical skill shortage, so as to ensure savings in foreign exchange outflows;
- (iv) commitments and national obligations for the support of regional or multinational specialized training, research institutions as well as related Fellowships and Training Programmes are duly honoured.

Restructuring and streamlining of national administrative structures so that they are not only capable of monitoring their own internal operations, but are capable of implementing the activities and programmes, and are capable of adjusting to the changing internal and external demands of development efforts through:

- (i) continuous monitoring of its own performance in relation to national development effort, making necessary structural, resource (man/materials/money) mix, and the plan it is executing;
- (ii) continuous review and monitoring of the application and effectiveness of its rules, procedures, communication patterns, and machinery and re-adjusting them for better results;

- (iii) setting up performance audit systems and units to ensure that (i) and (ii) above are affected and institutionalized, and that open communication systems, organizational development as well as policy examination analysis and review process form an integral part of the organizational performance audit and renewal process;
- (iv) controlling the proliferation of administrative/organisational structure in the light of resource demands of the economic development efforts and the need to minimize government operational costs;
- (v) maintaining an efficient merit system for the attraction, retention, motivation, training and career development of public servants to ensure the use of staff motivated by internal standards of excellence and commitment to development objectives in the discharge of their duties.

Adopt policies and measures that would ensure increasing reducing in the dependence on the use of foreign experts and skills and at the same time promote the training of nationals in technical co-operation projects and foster the employment of African expertise within the region.

Developing programmes for training rural inhabitants and those in informal sector in various occupations and adapting such training to improve indigenous skills and technologies. This measure should provide for fundamental and comprehensive review and overhaul of prevailing methods and techniques of training and adult learning for the acquisition of skills, transfer of technologies and know-how. The role of non-formal training methods and media in the training of the masses of the population should be given adequate recognition and support.

To be able to respond to the increasing demand for more technical manpower input in production sectors, especially in respect of industry and agriculture, as well as in science and technology, the skill-mix ratio in the production of scientists, technicians and artisans should be increased to 1 scientist to 5 technicians to 30 craftsmen and artisans.

Improved income opportunities and gainful employment for youth and school leavers should remain one of the principal objectives in development activities in all production and service sectors. Such a policy should be reinforced with effective skill and managerial training programmes in the informal sector, especially in the unorganized entrepreneurial economic activities in urban peripheries.

Attention should be given to programmes that improve the quality of life and the performance of workers through improved nutrition, better housing, medical and health care and healthy environment. The requisite manpower at all levels, for the execution of programmes and activities contributing to the improvement of the quality of life, should therefore be developed and efficiently utilized.

The development of a nation requires collective efforts of the whole population; therefore, measures should be taken to ensure full and effective participation.



## B. At Regional and Subregional Levels

The required action at these levels would of necessity be directed to reinforcing national action through providing guidelines for, and facilitating action in, manpower development and utilization. The programme strategy therefore emphasizes co-operation and collective self-reliance in manpower resource through:

- (i) manpower studies and preparation of manpower profiles and training programmes in specific branches and product lines in the main production sectors and supporting services, thus providing guidelines for the formulation and initiation of training programmes at national levels designed to meet manpower requirements;
- (ii) support for an information and placement service facilitating the identification and employment of African experts and consultancy organisations such as is being operated by the ECA programme for promoting the use of African experts and the development of indigenous consultancy services;
- (iii) adoption of employment policies that permit free movement of labour within subregions, thus facilitating employment of surplus of trained manpower of one country in other member States lacking in that requisite skill.

Effective support for, and full use of the facilities of regional and sub-regional training and research institutions through providing funds for the operation of, and sponsoring the training of nationals in specialized regional, subregional or multinational training institutions. Co-operation and collective self-reliance in manpower development can only be effective when African States pool their resources to develop and operate newly established training and research institutions in support of the manpower requirements of priority development sectors and product lines, and to strengthen and make full use of existing institutions.

Support for the OAU/ECA Co-ordinated and administered Expanded Training and Fellowship Programme for Africa which aims at training 2000 Africans in five years with priority to the manpower requirements of the various priority sectors and product lines already mentioned; to the development of the teaching and research staff of regional and subregional institutions; to experience transfer, and to evolving an African TCDC in utilizing available training facilities within the region. This programme needs a minimum operational budget of US\$1.5 million a year as well as training places. Support by African States are required through:

- (i) financial grants for the operation of the programme;
- (ii) provision of fellowships, scholarships and trainee places through OAU and ECA for the ben-fit of other member States;
- (iii) nominating nationals for training under the programmes, including student and teacher exchange arrangements;
- (iv) providing regular information on national training and scholarship facilities available for training nationals of other African countries.

### C. International Action

The principle of co-operation and collective self-reliance which African States have adopted recognizes in respect of human resources development and utilization that African countries must first help themselves individually and collectively in striving for survival and progress. However, international support in aid of human resources development is welcome as supplementary to the African self-reliant effort. Such assistance should be seen and regarded as reinforcing the national, regional and multinational development efforts that African States must make in order that there can be development and progress. In this effort the continued and active collaboration of all international agencies within the United Nations system and other international, inter-governmental and non-governmental bodies should be effectively mobilized in support of national, subregional and regional effort for human resource development and utilization.

## MANPOWER AND MANAGEMENT-BASED DEFICIENCIES IN THE CAPABILITY AND CAPACITY FOR THE IMPLEMENTATION OF THE LAGOS PLAN OF ACTION

The Lagos Plan of Action paid attention to a consideration of the capabilities of member States to take needed action towards the implementation of the LPA. In some sectors this took the form of stock-taking of the deficiencies in manpower and management capabilities. This was an identification of skill-gap in terms of manpower availability, skill requirements as well as management capability for the implementation of the plan. The main weaknesses identified in the plan are hereunder summarized in terms of both general and sectoral manpower situation.

### I. General Situation of Executive Capacity and Capabilities

1. The will to develop, to make the sacrifice, to genuinely cooperate, to choose among difficult options and determine realistic priorities, and to support multinational training and research institutions.
2. Inadequate institutional infrastructure for specialized training in critical manpower areas and research for development due to: lack of funds for the right type, level, and quantity of teachers and instructors; for equipment and laboratory facilities; to develop new course offerings according to manpower needs; to finance R and D; and to support multinational training institutions.
3. Absence of certain specialized training and research facilities at national or regional levels.
4. Irrelevance of curricula and course contents in formal educational systems in terms of skill-knowledge base for manpower development and the divergence between education and the natural resource endowment and socio-economic milieu of the country.
5. Shortage of middle-level technical and supervisory staff resulting in less than optimal utilization of highly trained senior staff.
6. Shortage of teachers, instructors and trainers, especially those for vocational, science and technology subjects.
7. Unfavourable job attitudes: the beggar/dependency attitude; public ethics and integrity; lax attitude to self-help and to exert one's efforts; public property mentality.
8. Mal-utilization of available trained manpower: underutilization, destruction of initiatives and motivation, inefficient deployment and use of trained manpower; underutilization of women for productive work in modern sector, and of the armed forces for public works.

9. Lack of Balance in the Arts/science/technology mix in formal education courses available to the productive workforce. Too many educated persons without functional manpower skills and too few with the capability to use their hands, brains, creative minds and talents to innovate and solve development problems.
10. Over-reliance on use of foreign technical assistance and open-market hired qualified personnel, especially managerial and technical personnel and technical consultants.
11. Ineffectiveness in development planning and implementation capabilities, particularly in respect of machinery and institutional arrangements for human resources planning, employment planning and training needs assessment for training programming.

## II. Specific Deficiencies at Sectoral Level

### 1. Food and Agriculture

- i. Insufficient attention to policies for promoting productivity in agriculture and improvement of rural life.
- ii. Weaknesses in capability to translate policies into concrete action programmes.

### 2. Natural Resources

- i. Lack of information on natural resource endowment over large unexplored areas.
- ii. Lack of adequate capacity (capital, skills, technology) for the development of known resources.

### 3. Industry

- i. Lack of modern industrial culture and the associated technology and and job attitudes.
- ii. Lack of adequate supply of technical, managerial and supervisory skills for the operation of industrial processes and design.
- iii. Underdevelopment of entrepreneurship outside trade and agriculture sectors.

### 4. Science and Technology for development

- i. Ineffectiveness of existing national machinery in coping with endogenous technology development.
- ii. Vagueness in the conception of science and technology policy and its contents.

- iii. The inability of existing science (and technology) education to produce students with skills essential for development and the inappropriateness of clinical settings for essential skill acquisition.
- iv. The inappropriateness of existing machinery for the regulation of technology transfer transactions.
- v. The low level of priority accorded to science and technology, especially in financial allocations.

5. Energy

- i. Shortage of qualified manpower, especial technical and managerial personnel.
- ii. Lack of a national energy policy in most African countries and the non-integration of energy activities in overall national development planning efforts.
- iii. Lack of real political will for promoting genuine cooperation in the energy field.

## MANPOWER AND MANAGEMENT REQUIREMENTS FOR THE IMPLEMENTATION OF THE LAGOS PLAN OF ACTION

The following is an outline, sector by sector, of the manpower and management requirements indicated in the Lagos Plan of Action:

### I. Food and Agriculture

Food Losses: trained personnel in the construction of storage facilities, grain stock management and in forecasting and early warning systems.

Livestock: a main area for action is training, establishment of subregional training centres and workshops on livestock production, slaughter-house practices and poultry and small stock development.

Forest Production: increased training at national and regional levels of forest professionals, technicians and guards.

Extension Service: training efforts should concentrate on extension workers who should in turn, focus their work on rural youth and women. Extension institutions, especially farmer training centres, need to be strengthened.

Agricultural Services: strong institutions should be developed for rural development planning and monitoring, data collection, provision of agricultural credit and inputs, efficient transport, marketing, agro-industrial development and storage and processing.

Implementation and Monitoring: high priority should be given to building up national capabilities in the identification, preparation, execution and evaluation of agricultural development projects. FAO, in collaboration with ECA and other relevant agencies, should expand its training programmes in this field. Regional and sub-regional seminars/workshops should also be organized.

### II. Industry

To achieve 1.4% of world industrial production and achieve a good measure of self-sufficiency in food, building materials, clothing and energy during the 1980-1990 decade requires:

the development of human resources to ensure that they are fully mobilized in the industrial development process.

Requirements for the achievement of industrial development:

#### i. At the national level:

Establishment of training facilities for technical personnel which will meet the requirements at all skill levels.

Training of Africans both at supervisory and intermediate industrial management levels should be given high priority so as to lessen Africa's dependence on foreign managerial competence.

Establishment of institutions responsible for promoting industrialization, in the field of studies, research, standardization and other services.

ii. At sub-regional and regional levels:

Strengthening existing institutions (African Regional Centre for Technology; African Regional Centre for Engineering Design and Manufacturing; African Industrial Development Fund etc).

Optimizing the utilization of existing training infrastructures and strengthening of existing training centres for effective use by nationals of the various African countries.

iii. At the International level:

In their relations with other developing countries African countries will in particular strive to implement joint technical training programmes.

III. Natural Resources

Strategy for the 1980s includes:

Undertaking comprehensive manpower, technology and capital needs surveys for natural resources development activities with a view to enabling the countries to pool their resources for the implementation of national and African multinational natural resources development programmes and projects.

Strengthening existing national and African multinational institutions dealing with natural resources development and conservation activities at all levels, including training, research, production, processing, fabrication, marketing, finance, etc. and the establishment of new ones.

To enable African Governments to exercise sovereignty over their natural resources, they should take all necessary measures through the development of the relevant human and institutional infrastructures to establish indigenous technological capabilities in the exploration, processing and exploitation of their natural resources.

Establishment of joint facilities for applied research, specialized services and training.

Mineral Resources: Training in all aspects of mineral resources development of high level specialized personnel as well as of medium level technicians from African member States in order to alleviate the shortage of qualified manpower and to reduce the dependence on overseas expertise and specialized services.

Active participation of member States in, and support for African multinational mineral resources development institutions and the establishment of additional sub-regional mineral resources centres.

Water Resources: Institutional strengthening - National Water Committees; at regional level, an Intergovernmental Committee on water for the African Region.

Cartography and Remote Sensing: Member States should actively participate and support regional training and service centres in cartography in order to reduce the costs of each producing needed manpower.

#### IV. Human Resources Development and Utilization

##### Action at the national level

Manpower Planning: Integration of manpower planning, development, placement and utilization functions into a Ministry of Manpower Development to undertake realistic manpower assessments, projections and programming, and to co-ordinate manpower development effort and monitor manpower placement and utilization effort on a continuous basis.

Training Development: Establishing and operating definitive and comprehensive national training development policy guidelines and legislative acts that provide for the following functions:

- Training guidance and co-ordination machinery with a profession oriented Training/Staff Development Officer cadre and sectoral or ministerial advisory committees.
- Centrally administered Training Fund that ensures availability of funds for manpower training.
- Establish a Central Advisory Council with representation from sectoral committees and charged with training development and manpower utilization responsibilities.
- Ensuring link between multinational/sub-regional/regional projects on human resources development and utilization and national policy guidelines and development plans.
- Periodic review, establishment and operation of strategic training development programme activities, especially in science and technical teacher training; training/staff development officer training; management/executive/supervisory cadre training.
- Task analysis and use of skill training modules.
- Double intakes and other cost-saving alternatives in post-primary educational institutions.
- Non-formal programmes in adult learning.
- In-plant industrial training, use of teaching factories and project attachment training.



Educational System: Periodic appraisal and review of educational policy and training practice of institutional and staff capacity and capability; reform and reorientation of curricula, course content and course offering in response to changing patterns in assessed future manpower demand.

Consolidation and integration of fellowships and scholarship programmes and financial resources for training under one agency within a ministry to ensure that:

- available resources are directed to meeting the most critical training needs;
- efficient and equitable use are made of available resources for training in skill shortage areas;
- commitments and national obligations for the support of regional or multinational specialized training and research institutions are duly honoured.

To be able to respond to increasing demand for more technical manpower input in the production sector, especially in respect of industry and agriculture, the skill-mix ratio in the production of scientists, technicians and artisans should be increased to 1 scientist to 5 technicians to 30 craftsmen and artisans.

Other training priorities: Adopt policies and measures that would ensure increasing reduction in the dependence on the use of foreign experts and skills while encouraging the training of nationals in technical cooperation projects and fostering the employment of African expertise.

Developing programmes for the training of rural inhabitants and those in the informal sector in various occupations and adapting such training to improve indigenous skills and technologies. The use of non-formal training methods and media in the training of the masses of the population should be given adequate recognition and support.

Improved income opportunities through gainful employment for youth and school leavers should remain one of the principal objectives in development activities in all production and service sectors. Such a policy should be reinforced with effective skill and managerial training programmes for the informal sector.

For increased quality in manpower resource more attention should be given to programmes that improve the quality of life and the performance of workers through better nutrition, better housing, medical and health care and healthy environment.

Public Administration: Restructuring and streamlining national administrative structures so that they are capable of monitoring their own internal operations and the implementation of the activities and programmes that they manage through:

- setting up performance audit systems and units.
- controlling the proliferation of administrative/organizational structures in the light of resource demands;
- maintaining an efficient merit system for the attraction, retention, motivation, training and career development of public servants.

#### At Sub-regional and Regional levels

Programme strategy emphasized cooperation and collective self-reliance in manpower resources through:

- manpower studies and preparation of manpower profiles and training programming in respect of specific branches and product lines in the main production sectors and supporting services;
- support for information and placement service facilitating the identification and employment of African experts and consultancy organizations;
- adoption of employment policies that permit the free movement of labour within sub-regions.

Intra-African cooperation and self-reliance in human resource development directed to:

- effective support and full use of regional and sub-regional training and research institutions through providing funds for the operation of these institutions and/or sponsorship of the training of nationals;
- pooling resources to develop and operate new and specialized training and research institutions which need to be developed in response to manpower requirements in priority development sectors and product lines;
- strengthening and making full use of existing institutions; support for the ECA co-ordinated and administered Expanded Training and Fellowship Programme for Africa.

#### International Action

International support in aid of human resource development should supplement and reinforce, national, regional and multinational development efforts.

## V. Science and Technology

### National Action

- a) Establishment by each African Government of a national "Centre" for Science and Technology for Development that is capable, inter alia, of: initiating and monitoring the national science and technology policy, and preparing national science and technology plans; organizing programmes of training manpower in science and technology policy formulation and planning; initiating policies in science and technology manpower development and utilization.
  - b) Development of human resources for Science and Technology, involving the following specific activities:
    - i. Surveys of scientific and technological manpower needs in all sectors and the determination of the mix of professional manpower requirements on which development should be based.
    - ii. Development of technical entrepreneurship through training technical manpower on "learning by doing" method; introduction of management courses in engineering and technician training curricula, and broadening the training of engineers to include practical elements of technology.
    - iii. Establishment of training programmes in technical fields where there are acute shortages of manpower such as production engineering, industrial design, chemical engineering, metallurgy, etc.
    - iv. Development of programmes to train and encourage more women to enter science and technology as a profession.
    - v. Mobilization of the adaptive technology potentials of the informal sector.
    - vi. Mass popularization of science and technology through "learning by doing" method.
    - vii. Large-scale curriculum revision campaigns aimed at making scientific and technological education and training more relevant to the development needs of the local African environment.
    - viii. Training of science and technology trainers and instructors.
    - ix. Adopting measures aimed at reversing the "brain drain" of African scientific and technological manpower.
  - c) Development of infrastructure for Science and Technology Base, through among other measures:
    - i. Appropriate machinery for the development and transfer of technology such as will, among other things, regulate the technological and other activities of transnational corporations so as to ensure that they make
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positive contributions, to the development of indigenous technological skills, the generation of local employment opportunities, the transfer of technological and managerial knowledge to local distributors and users of capital goods and other goods manufactured by local subsidiaries.

- ii. Establishment and strengthening of a national centre for technology information acquisition, processing and dissemination.
- iii. Institution building for the development of technology, the regulation of, transfer and adaptation of technology for educating and training scientific and technological manpower at various levels, and for financing science and technology development activities.
- iv. Mobilization of indigenous technology potentials in the formal and informal sectors through workshops for the in-plant vocational training of indigenous personnel in the various fields of industrial production.

#### At Sub-regional and Regional levels

Support for the operations of regional and sub-regional intergovernmental technological institutions in Africa, both in terms of financial support and their use.

Establishment of multinational "Teaching Companies" as the "engineering equivalents" of teaching hospitals.

Establishment of regional and sub-regional Technical Consultancies.

Establishment of Centres of Excellence for Training and Research in technology for development.

Development of Exchange Programmes for Women for the improvement of Skills.

#### At International level

Financial assistance in the development of various science and technology infrastructures and regional and sub-regional science and technology training and research institutions listed above.

### VI. Transport and Communications

The requirements under the Decade Programme are outlined as follows:

Communications: Manpower development and training in telecommunications, both operational and managerial personnel. This requires the establishment of training centres at national and sub-regional levels in the various fields of telecommunications operations and the organizations of specially oriented seminars and workshops.

Railways and rail transport: Training programmes at all levels to improve operational and managerial techniques.

Maritime transport: A large manpower training is needed and includes the construction of two regional maritime academies as well as national nautical colleges.

Ports: The importance of training for all categories of port staff has been stressed in various identified projects.

Air transport: Training projects have been stressed; the construction of a few regional schools has been recommended.

Inland water transport: Setting up of river craft schools.

Broadcasting: Setting up and improvement of broadcasting, training institutes and manpower development.

Postal services: Training of personnel.

#### VII. Trade and Finance

Intra-African trade: Training of experts in foreign trade expansion.

International Negotiations: African States should take steps to establish appropriate structures for the training of qualified senior officials in international economic relations and negotiations.

#### VIII. Economic and Technical Cooperation

No specific indications in the Plan.

#### IX. Environment and Development

One of the various priority areas requiring immediate action in Africa is environmental education and training, legislation and information:

Calling for the creation of national programmes in environmental education to develop environmental consciousness in the population; improvement of legislation and law enforcement to protect the environment; and the collection and dissemination of environmental data.

Institution building: National coordinating machinery should be established to monitor environmental problems for action, develop environmental education and training programmes and advise on environmental legislation.

International action: Provision of educational soft-wares on the environment, training facilities, scientific equipment to establish environmental monitoring centres, development of environmental protection legislation and data bank on environmental information.

#### X. The Least Developed African Countries

One of the main objectives and measures to be attained by every African LDC is the following:

Full participation of the people in the development process. The development of national capabilities should be accelerated in order to utilize efficiently and exercise full control over their natural resources and lay a strong scientific and technological infrastructure for rapid economic growth and transformation.

To fulfil the foregoing objectives priority action must be given, among others to:

- training of farmers in the use of improved techniques;
- the development of a national education and training programmes with a view to ensuring an appropriate linkage to the production process as well as to internal and external marketing activities and to product development;
- the improvement of their development planning and administration, including data collection, processing and dissemination in order to strengthen their capacity in the formulation and implementation of plans and programmes as well as to facilitate the monitoring of progress at the regional and international levels.

#### XI. Energy

Hydrocarbons: Training of cadres and technical staff in prospecting for and exploiting oil deposits. African experts should be placed at the disposal of member States who so desire.

As medium and long-term action, the establishment of machinery to coordinate activities and formulate policies for national development and utilization of hydrocarbons.

Establishment of training and research institutions in the field of fossil fuels exploration, development and utilization.

National arrangements for controlling and managing activities involving hydrocarbons should be strengthened.

New and Renewable Sources of Energy: Establishment of sub-regional and regional machinery for cooperation and coordination of solar energy activities in Africa.

Nuclear Energy: The necessary technical cadres should be trained and research encouraged so as to follow technological developments in the utilization of nuclear energy and to make the right choice.

Promote the establishment of an African Nuclear Energy Agency with a view to follow up developments in nuclear technology, formulate and harmonize nuclear energy development programmes in Africa, and provide manpower training in the nuclear field.

## XII. Women and Development

Humanpower and management development requirements for women active participation in development are diverse and spread through all sectors. Selected instances of education, training and management development needs are given below.

Education and training: All projects for increasing and diversifying the education and training of women and girls must be planned and executed within the context of overall national planning for humanpower needs. National educational policies and programmes must take due cognizance of the national economy and employment objectives in order to provide education and training geared to equipping women for effective participation in the economic life of Africa.

In formal education special efforts should be made to ensure that girls with the ability to advance to higher levels of education or specialized training receive education and training suited to their aptitudes.

Adult education programmes should be geared towards increasing awareness and full participation of women in modern world of science and technology.

In respect of training the number and variety of vocational institutions for women should be increased; vocational training should be encouraged and valued; priority should be put on the training of trainers with equal access for girls and boys and special consideration to appropriate agricultural technology; and training should be offered to women in the field of promoting management and administration of cooperatives.

Training for formal and informal employment in business, commerce, industry and handicrafts: Women should be trained in all aspects of running small-scale industries and of trade management, marketing and cooperatives, and apprenticeship system in handicraft training should be encouraged.

Training women for their multiple roles.

Employment: Possibilities for women's self-employment could be increased by the provision of guarantee or loan funds for small and medium-scale enterprises in urban and rural areas.

Communications and mass media: Training of women for careers in journalism and specialized training for journalists in the particular problems of women.

Increasing women's access to the media.

XIII. Development Planning, Implementation and  
Management; Statistics and Population

Planning: Emphasis should be given, among other things, to the eradication of mass poverty, unemployment, underemployment and the satisfaction of basic needs.

Better utilization of human resources in agriculture and the development of scientific research centres related to adequate extension services.

In technology emphasis should be put on the acquisition, development and utilization of labour-intensive techniques and to take this aspect into consideration during the selection and implementation of projects.

In plan formulation and implementation appropriate steps should be taken to ensure the strengthening of the planning machinery at the national level, and a greater integration of national plans within sub-regions.

Statistics: Each government should institute appropriate mechanism for collection, processing, evaluation, analysis and dissemination of data. These mechanisms should ensure proper linkage between data collectors, analysts and users.

Population: Nationals must be trained to undertake the collection and analysis of demographic data. In this regard support should be given to the existing training centres.

The current excessive rural-urban migration calls for the establishment of a programme of planned distribution and redistribution of population tied to policies and programming for human settlements and integrated rural development.