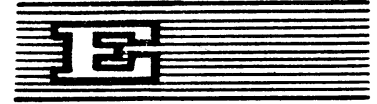


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On Approaches for Planning Human Resources and their  
Applicability in African Countries

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1. The situation is further compounded by the conceptual difficulties and problems of definition of the various labour force categories. The concepts and definitions in force in Africa have been developed on the basis of the realities of the developed, industrialized economies and are clearly inapplicable to African socio-economic conditions. Institutional problems and staffing difficulties prevent human resources planning organs to take effective actions in affecting the demand side.

2. This paper will propose a set of definitions of labour force concepts for the consideration of the conference, which would attempt to capture the realities of African labour markets. Inefficiency of data for employment planning purposes can be overcome, using a number of unconventional approaches to develop indicators for planning. Accordingly, this paper proposes ways in which employment planning could be rendered more effective made to contribute more positively to the reduction of unemployment in African economies.

On Approaches for Planning Human Resources and their  
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**Abstract**

Even though the Lagos Plan of Action, APPER and UN-PAAERD all emphasized the importance of the human dimension in the development and recovery process in African countries, at actual programme implementation level, little action has been taken to improve human resources planning for a better utilization of human resources on the continent. Yet the compounding problems of unemployment and underemployment dictate that African governments take immediate steps toward the eradication of these serious and growing social problems. Economic expansion does not guarantee an improvement of the employment situation, or the absorption of appreciable proportions of the growing labour force. Because of the characteristics of the labour market and in particular its imperfection in Africa, instead of relying on indirect macro-economic approaches, more direct intervention is indispensable for generating the necessary employment opportunities and in increasing total labour productivity. In the developed countries human resources planners formulate strategies to influence the supply of labour on the basis of the demand projected or monitored by them. In Africa, however, the realities of the labour market and trends in economic growth are such as to call for much greater emphasis to be placed on the stimulation of demand, so that greater opportunities could be provided for employment of a growing labour force. In so doing, it is important for planners to take into cognizance the structure of African labour markets, namely, the existence of a formal wage sector which is largely urban based, an informal sector and a rural agricultural sector. Their characteristics, behaviour and method of operation as well as the overall economic situation surrounding them must also be taken into consideration. To create labour market demand one has to institute measures to induce the type of growth in these economies that would be most favourable to employment generation. This would require first, an understanding of the magnitude of the problems of unemployment and under-employment as well as the bottlenecks constraining employment creation and productivity increases. Under normal circumstances, such an exercise would call for the collection and analysis of a large amount of data. In fact, it is the availability of this data base that makes employment planning easy in the developed countries. It is its inadequacy in Africa that renders it almost impossible for employment planning to be undertaken with any measure of effectiveness, especially where conventional approaches are used. The unemployment situation in Africa calls for greater efforts to be directed to employment planning which cannot be undertaken in conventional ways, given the data constraints facing the African planner. It is therefore necessary for him to resort to "unconventional", more innovative approaches to the planning of employment creation.

## I. Introduction

3. The ultimate purpose of socio-economic development is the improvement of the welfare of human beings. In Africa, however, "development" has often neglected human needs as evidenced by the fact that in the 1960s and 1970s many African countries did achieve high rates of economic growth which did not significantly affect the levels of living of the masses of the people.
4. The balance sheet has not been all too impressive: open unemployment has grown from 5.3 percent of the labour force affecting 12 million workers in 1980, to close to 13 percent of the labour force or some 30 million workers today. Underemployment which stood at 40 percent of the labour force or 60 million workers, has now grown to affect 96 million people or over 40 percent of the labour force of some 230 million workers.
5. Even the present policies of structural adjustment have paid no heed to human wellbeing. In fact structural adjustment programmes are clearly hostile to the African labour force in that they openly call for a contraction of employment markets. The reduction of public sector expenditure and investments in development activities have seriously depressed aggregate labour demand thereby causing increasingly higher levels of open unemployment. An estimated 1.5 million new permanent jobs in the formal wage sector were thus lost to the African labour force.
6. Public sector employment freezes and retrenchments have also worsened the problem for unemployment. This situation is most disturbing considering that the public sector is a major employer in most African countries <sup>1/</sup> In addition, no planning interventions have so far been forthcoming, to stimulate the private sector to the extent that it could ease employment bottlenecks. If anything, the pursuit of structural adjustment policies have resulted in the contraction of enterprises in the public sector of African economies that has the greatest potentials for employment creation. This has been the case in countries such as Nigeria, Ghana and Zambia. Other adjustment policies that have impacted significantly on employment include wage freezes, the removal or reduction of subsidies on essential goods and services, the concomitant declines in real wages and salaries and the increases in levels of poverty. Structural adjustment programmes have caused the loss of some 3.6 to 4 million new permanent jobs in the African economy. This is a sad reality which the African planner must confront.
7. It appears that there are three major factors which prevent human resources planners from playing a more active role in the formulation of viable employment-generation strategies. One is a
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- <sup>1/</sup>In 1985, public sector employment as a percentage of total wage employment was 55% in Mauritius, 48% in Kenya, 45% in Senegal, 39% in Botswana and 37% in Burundi

most unfortunate misconception or the "myth" which still conditions development planning in Africa, that growth is synonymous with development. Even after empirical evidence in Africa has exposed this myth for what it is, many planners, especially, at the sectoral ministry levels are still not completely free from the idea that economic growth always brings along with it, social development, and that growth will automatically spur employment creation. The evidence is that this does not hold true for African economics. In a bid to improve social welfare and employment generation more emphasis must be made to induce labour demand within the economy. The second factor is the traditional role of labour ministries which were inherited from colonialism and which are not oriented to the new tasks of development. Most African ministries of labour are still not equipped with the right orientation for taking on employment planning with any measure of effectiveness. The functions and scope of work of African labour ministries has to be widened and be supported by economic planners who play a key role in development activities. The third factor originates more from the planners themselves. Because of the conventional approaches they tend to use planners have not been able to overcome the constraints they face in planning employment growth. These approaches which were evolved for use in developed industrialized, monetized, market economies, severely circumscribe their efforts in addressing the employment needs of African labour markets and allow them to capture only the formal wage sector - 10-15 percent of the labour market - at best. Planning does not therefore affect the remaining 85-90 percent of the African labour market.

8. In order to provide some basis for practical discussion in pursuit of the most realistic approaches to employment planning in this continent, therefore, this paper attempts, first of all, to re-examine macro-economic employment planning models and approaches and their applicability in African economies in the next section. 2/ The third and fourth sections of this paper will discuss external and internal factors constraining employment planning in the context of the total macro-economic picture in Africa. Based on a clearer understanding of the problems surrounding the African human resources planner, this paper proposes alternative approaches and makes recommendations for more prompt and realistic formulation and initiation of policies and programmes towards the better utilization of human resources and their inclusion in the integrated development strategies of African countries.

## II. Growth-Oriented Macro-Approaches

### (a) Limitations of the formal manufacturing sector

2/The basic framework and elaboration of theoretical analysis of the second section was substantially guided by Michael P. Todaro, "Economic Development in the Third World", pp 223-243

9. The classical literature on development planning stresses that successful socio-economic development can be realized only through the twin forces of substantial capital accumulation and rapid growth of the modern industrial sector. The growth of the modern industrial sector would be accompanied by substantial increase in the demand for labour which would be met from the supplies from rural sector where the labour force is engaged in low productive subsistence agriculture. It was often argued that because the marginal product of labour in the mostly family-operated rural/subsistence agriculture is so low or almost negligible, there was no social cost in drawing workers from rural subsistence agriculture to the urban industrial sector since there was very little, if any opportunity costs involved. African countries should therefore pursue "development" strategies that would accelerate the growth of the modern industrial sector to generate surplus, which could be reinvested into further growth activities in that sector. The large reservoir of "surplus" labour in the rural areas could be drawn upon to provide the labour input required for implementing this strategy of development. Through this process, African countries would be able to proceed more rapidly towards the achievement of economic self-sufficiency. The modern sector at the same time, was to absorb "surplus" labour from rural area. In the process, more jobs would be created and productivity both in urban and rural areas would be significantly increased. Since the Industrial Revolution, this has been the case to a greater or lesser extent in the economic development of industrialized countries of Western Europe.

10. The applicability of this theory to African economies is impracticable for very simple reasons. In 1856 in France, some 20 percent of the workers were engaged in manufacturing and in Germany in 1870 it was some 30 percent. In both countries, the labour force was growing at no more than 1 percent a year. With this situation and since labour productivity in manufacturing was not increasing at a substantial rate, in order for the manufacturing sector in these countries to absorb annual total increases of the labour force, all that was required was an annual output growth of only 5 percent for France and 3.3 percent for Germany, in that sector. (i.e.  $0.2 \times 0.05 = 0.01$  and  $0.3 \times 0.033 = 0.01$ ). In African countries, labour force increases are much faster than the rate in France and Germany in the mid 1800s <sup>3/</sup> while the rate of total labour force employment in the manufacturing sector in Africa can be estimated at no more than 25 percent of formal

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<sup>3/</sup>based on "World Population Prospects", United Nations, New York 1986 and "Economically Active Population", ILO, Geneva, 1986 average annual labour force increase in Africa is 2-3 percent.

sector employment. <sup>\_4/</sup> Therefore, for an industrial sector which employs, say, 5 percent of the total labour force to absorb 2 percent annual labour force increases that sector has to grow, in terms of output, by 40 percent annually without any increases in labour productivity in that sector ( $0.05 \times 0.4 = 0.02$ ). If 1 percent increase in industrial output is accompanied by less than 1 percent increase in industrial employment because of the improvement of labour productivity, the required growth for the industrial sector so that it absorbs the additional labour force, would be much higher. And because the capital intensive technologies and methods of production are often introduced into African development projects manufacturing output growth in Africa has never induced a corresponding employment growth. <sup>\_5/</sup> It is therefore practically impossible for the modern manufacturing sector to generate enough employment opportunities to absorb new additions to the labour force in African countries.

#### (b) Macro-economic Models of Employment Determination

11. The traditional macro-economic models of employment planning and their inapplicability to African economics underscore the need for new planning opportunity to be evolved within the context of the realities of African labour markets. These approaches focus on wage and employment determination by demand and supply under the assumption of flexible wages and competitive free markets. This approach does fit Western economies from which it originated, i.e. under the existence of competitive markets the level of employment and the wage rate can be determined simultaneously with all other prices and factor uses in the economy, manipulating forces of demand and supply. Of course, such a model has little relevance in view of the realities of most of the labour market conditions in Africa, and because in many countries wage rates are not flexible downward as they are largely determined by government which is by far the largest employer in most of African countries as well as the hiring practices of multinational corporations.

<sup>\_4/</sup>Based on ILO Yearbook of Labour Statistics 1986 and JASPA "Recent Trends in Employment, Equity and Poverty in African Countries", ECA, 1988, the share of wage employment in is some 10 percent and wage employment in the industrial sector is about 25 percent of total wage employment.

<sup>\_5/</sup>According to David Morawetz, "Employment implications of industrialization in developing countries" Economic Journal 84 (September 1974), the relationship between industrialization and employment in some African countries between 1976-1969 are as follows: In Ethiopia, there was 12.8 percent manufacturing annual output growth while manufacturing employment increased by 6.4 percent. In Kenya, output growth was 6.4 percent and employment growth was 4.3 percent. In Nigeria, they were 14.1 percent and 5.3 percent respectively, and in Egypt output growth was 11.2 percent while employment grew only by 0.7 percent.



12. As is widely known, Keynesian theory explains the determination of national output and employment in terms of the level of "aggregate demand" in relation to an economy's "potential output" which the economy should be able to produce when resources are fully utilized. In other words, at the macro-economic level, the underutilization of any factor of production, including labour, is considered as the result of insufficient demand. Therefore, in order for an economy to achieve full employment and reach full output potential government has to intervene and aggregate demand through direct increase in government expenditure or through policies to encourage greater private investment. Keynesian theory suggests that if in a given economy the supply side can respond to an increase in demand automatically and autonomously then increase in government expenditure does reduce or eradicate unemployment. However, if the supply side cannot respond to a change in demand, i.e. the aggregate supply curve is almost vertical, the additional government expenditure may only result in higher prices and chronic inflation. Actually this is the experience of many Latin American countries since the 1950s. The Keynesian type policies do not work effectively in Africa because firms do not have the capability or infrastructure to respond quickly to a change in demand by rapidly expanding their outputs and employment and because of their general dependence on external markets for inputs. The policy implication here is therefore rather interesting. The Keynesian type policies and their application to African countries suggest that government expenditure, unless directed to create demand for output which can be produced locally and with local technology, will likely result in increasing inflation. In the long run, the supply side could be induced to be able to create greater output using imported capital. However, such an increase in output would seldom accompany a corresponding increase in employment opportunities.

13. In addition the African economy is not yet so integrated that direct investment in one production area can stimulate significant indirect demand responses in other areas, to the extent that employment is affected favourably. For example, studies on employment and the construction industry in developing countries indicate that one unit of final demand in residential construction can produce up to three man/years of employment within the economy: one man/year each on the job, in building materials industries and in other related industries. However, the disjointedness of sectoral linkages in Africa make it difficult to maximize employment through demand stimulation. An infusion of capital into construction for employment generation purposes would create at most half the possible jobs within the domestic economy, while the other half will be created in those economies which produce building materials for Africa. The structure of the African economy is itself the number one enemy of Africa's labour force. Efforts for achieving greater integration of the domestic African economy to promote African trade would greatly enhance the employment creation of African governments.

(c) Output and employment growth

14. It is evident that development projects pursued since the 1970s were actually based on an application of the Keynesian model to increase the levels of national output rapidly through accelerated capital formation. Since this model associates levels of employment with levels of GNP, it was also argued that by maximizing the rate of GNP, countries could also maximize their rate of labour absorption. It did not happen. The actual experience in many African countries which achieved remarkable GNP growth was that the higher output did not generate correspondingly greater employment opportunities.

15. Invariably, higher GNP growth was achieved through heavy investment in capital. With this capital intensity output per unit of labour, or labour productivity would increase and additional outputs could be produced by very little amounts of additional labour. The key is labour productivity. The rate of growth in output (Q) minus the rate of growth in labour productivity (I/N) approximately equals the rate of growth of employment (N):

$$dQ/Q - d(Q/N) = dN/N$$

16. If there is 10 percent growth in GNP resulting from development activities which increase average labour productivity by 8 per cent, there will be only 2 percent increase in employment growth. But the objectives of growth were not targetted on the creation of employment. In Africa growth has been for its own sake. Consequently, to maximize output growth, both neo-Keynesian and neo-classical growth models which have been pursued by planners suggest greater investment in capital-intensive production which hopefully would increase labour productivity as well. Thus the objective of maximizing growth turned out to be in conflict with the objective of employment creation.

17. If we rearrange the above equation the picture looks totally different:

$$dN/N + d(Q/N)/(Q/N) = dQ/Q$$

18. By shifting policy objectives from maximization of output to maximization of employment, output maximization and employment maximization become congruent objectives rather than conflicting ones. Development programmes that are both growth-oriented and employment-oriented would increase labour productivity. The difference now is, that with the policy targeted towards output maximization, the increase in labour productivity is often achieved at the expense of employment because such a policy normally entails substitution of labour by capital-intensive production methods. On the other hand, employment-oriented policies bring about increases in labour productivity also by utilizing less productive or unemployed labour and at the same time reducing unemployment levels with the economy.

19. Therefore while employment generation through growth oriented development programmes cannot easily be achieved, output growth through employment oriented policies is by far a more realistic and viable option.

(d) Factor price distortions

20. Profit maximizing producers are, as long as they behave rationally, supposed to choose production methods to produce desired amounts of output on the basis of a given set of factor prices in order to minimize the total cost of production. When labour is relatively cheaper than capital, then normally labour intensive method of production should be chosen. In other words, at the micro-economic level, the determinants of employment levels are the factor prices of various inputs. The reason why capital-intensive method of production have been preferred in the manufacturing sector or modern organized agriculture in African countries may be because actual factor prices of capital have been lower than that of labour. Because of a variety of structural, institutional and political factors, the actual market price of labour has often been inflated in many developing countries. At the same time through special loan terms, overvalued exchange rates, special government subsidies and preferential tax arrangements, etc. the factor price of capital has been artificially lowered and even become relatively cheaper than that of labour. These factor price distortion policies have therefore, adversely affected employment generation in Africa. In view of the rather wasteful misuse of limited financial and physical capital as well as the social cost of underutilization of labour, the overall total social cost of existing price distortions are substantial.

21. While the elimination of factor-price distortions is the right course of action for a better utilization of scarce capital and under-utilized labour, the actual employment impact of removing factor price distortions will depend on the degree to which labour can be substituted in the production process. Elasticity of substitution is roughly defined as the ratio of percentage change in the proportion of labour used relative to capital (i.e. the labour-capital ratio), compared to a given percentage change in price of capital relative to price of labour. That is:

$$E = d(L/K) / d(PK/P_L) / (PK/P_L)$$

22. As an example, if the relative price of capital rises by 1 percent and as a consequence, if labour capital ratio increased by 15 percent, then the elasticity of substitution is 1.5. In general, most empirical studies on the elasticity of substitution for manufacturing industries in LDCs reveal coefficients in the

range of 0.5 - 1.0. <sup>6/</sup> In other words, a 10 percent increase in the relative price of capital may create 5 to 10 percent increase in employment in that sector. Thus, considering the size of various factor price distortions in African countries, their elimination or reduction would have a substantial impact in the more efficient utilization of inputs including human resources.

### III. Realities of Labour Markets in Africa

23. In developed market economies, the human resources planners' major task can be more supply-oriented. Using various statistical techniques for estimating, projecting and forecasting manpower supply and demand planners monitor the behaviour of the employment and skills market. Their involvement in the demand side is not as active. On the basis of the observed demand and through better planning of education and training, or by affecting the supply side of the labour market, the planner is able to minimize frictional unemployment and close the gap between supply and demand in the various skill areas. In Africa, however, because of the imperfection of the labour market and the size of the problem, wide-scale government intervention in generating appropriate demand is extremely important. In addition, with a greater concern for the way various macro-economic policies impact on the employment market and the welfare of the entire population, it is now becoming most essential that human resources planning be accorded a most central position in macro-economic planning.

24. In the African economy, only some 10 percent of the African labour force operate in the formal wage sector which is largely urban-based <sup>7/</sup> It is estimated that the annual growth rate of wage employment during the period between 1975 and 1980 was some 3.1 percent, but it declined between 1980 and 1983 to 1.8 percent. The share of formal sector labour force in total labour force has also been decreasing since 1980. In many African countries, the public sector has been by far the largest wage employer, creating employment opportunities, more for social than for economic expediencies. The tide has now turned on the insistence of the World Bank and the IMF. Under the current pressure for restraint of government spending one cannot be optimistic about any further significant growth in public sector employment. The share of manufacturing sector employment in the total formal sector employment was approximately some 25 percent, and it also declined during the period 1980-1985. Since this sector is dominated by first stage import substitution activities, in the

<sup>6/</sup>David Morewets. Op.Cit. Additional data is also available in Howard Pack, "Policies to encourage the use of Intermediate Technology". Development Digest 14, No. 4 (October 1976) pp 94-108.

<sup>7/</sup>Based on ILO Yearbook of Labour Statistics, 1986. The average among LDCs is 5.5 percent; among oil exporting countries, it is 21.9 percent, and other countries 15.4 percent

absence of a drastic policy re-direction there may be little hope for future expansion to enable the sector to absorb any significant proportions of the growth of labour force.

25. On the other hand, there are greater potentials for generating employment in the urban informal sector. The labour force in this sector is largely urban-based, and mainly engaged in small scale trade and manufacturing activities ranging from street vending to medium sized auto-repair workshops. It is a sector which is not so structured as the formal sector and which is rather elusive in its behaviour to the extent that its activities can hardly be regulated by government. But it is dynamic, competitive and very effective in filling employment gaps and providing intermediate and final goods and services to both the formal and the agricultural sectors, as well as skills and incomes to millions of African workers. In terms of its size, it is estimated that the informal sector employs about 15 to 25 percent of the urban labour force <sup>\_8/</sup> Generally, recruitment takes place informally and apprenticeship is widespread as the most common form of entry.

26. Because of the competitive environment in which the sector operates, it is highly responsive to change as in demand and the level of purchasing power. It is a most promising sector on which to concentrate policies for employment expansion. This calls for a change of government attitudes to the informal sector. It should be realized that the strength of the informal sector lies in the fact that it operates with hardly any public sector controls, responding well to market forces. Governments should therefore not seek to regulate its operations, but rather should endeavour to assist it to function more productively with a view to increasing its employment generation potentials.

27. Both theoretically and realistically, agricultural employment expansion holds the key to the solution of Africa's unemployment problems. Some 70 to 80 percent of the labour force are in the rural areas working mostly in agricultural production. Their productivity is typically low, and production methods in force are still rudimentary. The contribution of this sector to GDP sector is far more important than what appears on official statistics because GDP and other national accounts data do not reflect small livestock raising, vegetable gardening, water fetching, fuel wood collection and other productive activities undertaken by the rural labour force. Although open unemployment is insignificant in this sector, the level of under-employment is extremely high. A re-dedication to rural development, on the part of African governments would cause programmes and projects to be directed, in a more intensified manner to investments in agriculture and to the provision of social services that would boost labour demand. In fact, it has been estimated that the full implementation of APPER and UNPAAERD would create between 2.56

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<sup>\_8/</sup>See the study on "The Informal Sector in Africa" carried by ILO/JASPA, Addis Ababa, 1985

and 3.20 million new permanent jobs. Most of these jobs would go to the rural agricultural sector since the bulk of investments for the recovery programme should be directed to the rehabilitation of African agriculture.

#### V. Alternative Approaches for Planning Human Resources

28. As has been discussed, while the tasks to be carried out by human resources planners in Africa is vital to socio-economic development and the improvement of the welfare of their population, many governments are yet to come up with realistic and workable concepts, definitions and measurement instruments which will enable planners to formulate comprehensive and integrated strategies for a better utilization of their human resources - the ultimate motor for the advancement of society through high levels of productive employment. This important responsibility facing planners cannot wait any longer to be discharged. As a matter of urgency, it is essential for human resources planners to consider how manpower and employment planning can be done given the limited materials available to them in view of the serious and growing problems of unemployment confronting most African countries. This section attempts to present a set of concepts, definitions and measurement techniques which could be adapted to local realities for use in estimating the labour force, employment and unemployment, and in making more realistic attempts to plan for employment creation.

##### (a) Concepts and Definitions

Human Resources should be defined as the skills, knowledge, attitudes, and resourcefulness which are all attributes peculiar to man and can be utilized to manipulate and transform material and physical resources to produce goods and services for the society. The term "human resources" can be used interchangeably with the word "manpower" to an extent that the term reflects totality of skills and knowledge.

The labour force should comprise all men and women who are willing and able to work, who are seeking work or who are actually engaged in the formal wage, the informal and the rural/agricultural sectors of the economy. This excludes the disabled, the very young (infants), full-time students in educational institutions, people in penal, medical and mental institutions and those in the armed forces. The determination of the age cut-off point for entrants into the labour force should take into account prevailing norms of labour force participation, particularly in rural areas where many never see the threshold of an education institution or have only fleeting experiences in one. Account should also be taken of the fact that large numbers of relatively young people in this sector are active in areas such as cattle-rearing, farming and other rural production activities. These realities should determine the point of entry into the labour force. Given also the fact that participation of the old,

especially in the rural sector continues well past the "statistical" retirement age, the applications of an upper age cut-off point should be made with a great deal of flexibility. Due regard should be paid of the fact that the in African societies continues to make significant social, thus rendering them socially productive well after they have ceased being economically active. Housewives who make significant contributions to society should also be included in the labour force.

29. The concept of employment has to be defined within the context of the actual structure of labour markets as described in the preceding sections, i.e. the three sectors: the formal sector which employs only about 10 per cent of the total work force, the informal sector which accounts for some 15 per cent and the rural/agricultural sector which absorbs the rest, some 75% of the labour force.

30. The definition of employment in African labour markets should therefore reflect the fact that production does take place within these sectors, which bring economic, material and socio-cultural benefits to the individual and society as a whole. Such a definition takes into account the significant contributions made by workers in the rural subsistence agricultural sector, in the elusive informal sector and in the more organized and highly structured formal sector of the economy. In all these sectors, but particularly so in the subsistence agricultural sector, many activities are engaged in from day to day which do not necessarily produce a tangible, physical output or are undertaken for pay or profit, but which require time and intensity of work and which are of value to society. In other words, an individual should be considered as being at work or employed if he/she is engaged in the process of producing goods and services for wage, profit, consumption or social benefit. Thus, for example, housewives would be considered as employed under this definition, as would subsistence agriculture workers and nomads.

31. Using the above definition of "labour force" and "employment", the unemployed can be defined as all those in the labour force who are willing and able to participate in the production of goods and services of social, economic and cultural value to society but who for some reason do not succeed in their search for opportunities for doing so. In other words the unemployed are those who are visibly out of work in spite of their active search for work.

32. There are various different forms of unemployment to be observed in African labour market. "Frictional unemployment", which denotes the mismatch between vacancies and skills, is considered to constitute a major part of the problem. "Demand deficient unemployment" results from insufficient labour demand to meet supply. It is by far the biggest form of unemployment in African countries on account of the recent economic stagnation and the application of structural adjustment programmes. "Structural unemployment" which results from structural shifts in

method of production or changes in consumption patterns can also be considered as a problem but its relevance is not substantial in African countries.

33. "Underemployment" refers to the situation in which a worker's productivity is unjustifiably low given his potentials and the production inputs available to him. It manifests itself in various different ways in all three economic sectors and

affects workers individually and collectively. In the urban formal sector, underemployment is caused by overstaffing, institutional rigidities, poorly formulated organizational structure and frictional underemployment - the mismatch of skills and knowledge of staff and their actual assignment. In the informal sector it is brought about by the poor quality of production inputs and the low levels of remuneration relative to the time and effort put into production. It could be corrected through training and the injection of more capital inputs to production. In the rural agricultural sector, poor infrastructure, nutrition and health problems, low levels of education, lack of access to even the simplest technology, fertilizers and basic tools, etc., all contribute to depressing the productivity of workers and causing widespread underemployment. Underemployment can be measured by the time required to produce a given output, by the quantity of that output produced, by its quality and by the value assigned to it. Even though it may be difficult to capture the incidence of underemployment with great precision, it is still possible to identify those factors adversely affecting the productivity of labour as indirect indicators of underemployment.

34. "Human resources development" should be understood as the process through which human resources can be improved upon, enriched and strengthened to be able to perform more efficiently in the process of producing goods and services. The major agents for doing so are the education and training systems and employment/staff development programmes. However, in many African countries human resources development has been limited in scope and geared mostly to the needs of the urban formal sector. As has been discussed, because of the vital role which the other two sectors have to play, more emphasis must be placed on the human resources development needs of the informal and the rural/agricultural sectors.

35. "Human resources utilization" refers to the system in which jobs are created, workers get employed and are made to engage in activities of high socio-economic productivity which fit their aptitudes, talents and potentials. The labour and employment market or the demand for and the supply of human resources as well as the level of actual productivity in relation to potential productivity - degree of underemployment - determine the extent to which human resources are utilized effectively and to the optimum.



36. "Human Resources Planning" denotes the process through which the present and future needs in levels and types of skills required for the production of goods and services are estimated, and programmes and strategies are formulated to meet the need and to redress the imbalances between the supply of and the demand for manpower within the economy. However, in view of the vital need to minimize the supply/demand imbalances by intervening not only on the supply side through appropriate manpower development strategies but also on the demand side, the concept of the term should be enlarged and redefined. In this context, the term should therefore be used to refer to the process required by a society for attaining optimality in the use of present and future human resources in all sectors of the economy, through (i) monitoring and projecting present and future demand for and supply of labour in various levels and types of skills; (ii) formulation and monitoring of strategies and programmes to redress supply/demand imbalances by coming up with appropriate education and training policies and programmes on the supply side and by monitoring employment markets with a view to ensuring that demand is adequately stimulated; and (iii) formulation of strategies toward elimination of underemployment to achieve higher marginal and average productivity.

37. "Human Resources Management" refers to the management of the present work force. It is central to efficiency in planning, development and utilization of human resources because it determines worker motivation, efficiency, and productivity. Its inefficiency results in low productivity and the underutilization of human resources. It is the nerve centre of the entire planning, development and utilization chain. This function can be strengthened only through the infusion of discipline, better coordination between planning, development and utilization agencies and greater harmonization of objectives and strategies among them.

(b) Estimation Methodology - An Example

38. As discussed in the previous section, it is often argued that one of the major constraints on the planning of human resources is the inadequacy of the data base. However, it has been discovered that in many countries much work has actually been done to collect data by many sectoral ministries. The problem seems to be one of co-ordination among various sectoral ministries. Even though a number of studies and surveys of an ad hoc as well as a continuous nature have been conducted by various sectoral ministries, data from the studies are seldom compiled centrally and systematically to be used by others.

39. Even when there actually do not exist any data in a certain area, very often workable or functional indicators and estimates can be derived from information already available to the planners. As an example, in the absence of reliable labour statistics, the estimation of the size of employment can be done as follows:

- (i) From population statistics with data on age structure, and rural/urban distribution, one can obtain the size of the labour force by subtracting from the entire population the very young (infants), full-time students in educational institutions, people in penal, medical and mental institutions and those in the armed forces. As discussed in the definition of labour force, the determination of the age cut-off point should be based on prevailing participation norms. The age cut-off point at the lower point for the urban labour force may be higher than that for the rural/agriculture labour force, by virtue of the higher school enrolment rates and the limited subsistence activities in urban areas.
- (ii) Studies on employment in the rural/agricultural sector in many African countries indicate that unemployment is insignificant in that sector. Unless national realities prove otherwise, the planner should assume this to be the case in his country.
- (iii) In every African country, there should be at least some information on recorded employment in the formal sector. The data in many countries may prove to be incomplete, therefore, using informed "guesstimates", the planner should adjust as appropriate to capture more realistically the size of formal sector employment. Then by subtracting formal sector employment from the formal sector wage labour force which is largely urban-based, the planner arrives at a residual which he can distribute further into the employed or unemployed categories.
- (iv) To do so, he must first account for informal sector employment. In the absence of data on the urban informal sector, we have to use some "informed guesses" of the size of urban informal sector employment. Existing studies on this subject suggest that in Africa, some 15 to 25 per cent of the urban labour force is engaged in the informal sector. This varies from subregion to subregion. In Southern Africa, it might be as low as 5-8 % the labour force whereas in some parts of West Africa, it could be as high as 40-45 %. Whatever the case, in the absence of data on informal sector employment, the planner should resort to the use of proxy data, which could then be applied to estimate the size of informal sector employment in his country. This should then be added to the estimates of recorded employment and to rural agricultural employment, to arrive at total employment, by the definitions contained in this paper, within the economy. The residual, i.e. the figure of total employees in all three sectors subtracted from the labour force, would then represent the figure of total unemployment within the economy. Divided by the total labour force, one could derive the

national unemployment rate. Divided by the urban, formal sector labour force, one arrives at the urban formal sector unemployment rate. In most African countries the former rate should hover between 4% and 8%, whereas the latter should be between 40-50%.

40. One of the obvious advantages of using this kind of estimation method is that the planner is able to make estimations and projections for planning even with poor quality data.

(c) Approaches to Affect Demand Side

41. Efforts should be made for a departure from the rather passive traditional approaches to employment planning to evolve more innovative approaches which could influence labour markets more actively to stimulate labour demand.

42. The planner should endeavour to create coherent and comprehensive strategies to affect the demand side of labour markets so that it more consciously addresses the need to reduce unemployment levels in the economy. Planning has tended to regard employment generation as a by-product of the efficiency of other factor inputs. The experience in Africa has shown that this is not necessarily the case: Economic growth does not always lead to higher rates of employment creation, because with the low level of development prevailing, it is easy for the infusion of capital and other factor inputs to be responsible for growth, without having more than a marginal effect on the labour demand. The major task facing employment planners is to evolve appropriate mechanisms to be built into the macro-economic planning process that would enable them to anticipate in clearly measurable and quantifiable terms, the employment effects of dollar of investment within the economy.

43. The problems of open unemployment has to be considered in the context of urban formal sector wage labour markets since by our definition, open unemployment exists therein in this sector. The effects of the economic crisis and of the implementations of structural adjustment programmes on employment markets in that sector are well known. Even in the private sector, no significant expansion is to be expected that would increase employment capacity under the prevailing conditions.

44. The problem of under-employment in the public sector should be reduced by efforts to increase labour productivity in that sector and not by simple lay-offs or reduction in staff except by attrition because the issue is not so much one of overmanning as compared to the amount of work to be carried out by the public sector. There are potentially many opportunities for work to be done in a large number of areas, including revenue producing activities which can be undertaken by the public sector. A means should therefore be found to activate these job areas and redeploy any excess manpower identified for retrenchment towards them. In this connexion, the introduction of something similar

to "Quality Control Circles" in the public sector may be of assistance in facilitating the conduct of such an exercise.

45. The existence of underemployment implies the potential to redeploy human resources to other areas without increasing additional expenditures. More human resources from the urban public sector should be redeployed especially to provide more support, and for training of workers in the informal urban and rural sectors. The redeployment of underemployed formal sector workers from urban areas to rural employment markets may be considered a positive means of sustaining employment levels and at the same time promoting productivity increases in rural areas.

46. The labour demand in the private sector should depend on the demand for the products of that sector. A gradual elimination of factor price distortions would greatly increase demand for labour and subsequently also improve total factor productivity. Of course, learning from the experience of the short-term adverse effects of structural adjustment which seriously affected the standard of living of the poorest groups of the population, policies toward such action have to be formulated in a most careful manner. It is also important to encourage and assist the formal private sector to increase labour productivity through training and other interventions.

47. The informal sector should be given much stronger Government support and to expand its operations and provide more employment opportunities and training to the urban labour force. Redirection of policies on the informal sector toward its active support is of extreme importance to the search for solutions to the problem of growing urban unemployment. The ILO has demonstrated that the creation of a single permanent job in a large scale capital intensive enterprise can cost as much as \$100,000 compared to an estimated \$300 to \$12,000 in a small service enterprise. If employment creation is to emerge as a priority in development planning the promotion of small enterprises holds great promise for job creation. Already, the potentials for these small scale enterprises to grow are clearly visible in Africa's informal sector. The planner's task is to harness this potential and to plan for its emergence to the fore.

48. Government support to the informal sector must be increased without imposing any negative controls over its growth. The strength, resilience and dynamism of the informal sector emanates from the fact of its being "informal". Government should refrain from any attempts to regulate its operations or to impose structures on it that would transform its character and reduce its effectiveness as the urban labour sponge. While "supporting without restricting" is not an easy position for government to take, there is a need to formulate clear policies favouring the growth of the informal sector by making credit facilities more easily accessible to agents within it and by providing training to improve on management capabilities as well as the goods and services they provide.

49. More efforts have to be directed towards increasing levels of output in African agriculture, in recognition of the primordial role this sector has to play in African economic recovery and growth, food security, and employment creation. At present, the total area of land under cultivation in Africa is 195 million hectares or only 26 per cent of all potentially arable land. Expanding the area under cultivation would provide great opportunities for a larger proportion of the rural labour force to be more productively employed. The level of utilization of the rural work force in the agricultural sector is far from its optimum for a variety of reasons. There is no reason for African agriculture to be still rain-dependant with the vast resources of water resources still untapped within the continent. Worker productivity in agriculture could be significantly enhanced if small scale water resource development projects were embarked upon using locally available materials and local technology. By promoting such efforts and utilizing in the process, unemployed and under-employed urban formal sector labour workers, labour demand would be stimulated not only in agriculture, but also in the contiguous sectors of industry, transport and communications, quarrying etc. and there would be induced demand for formal or informal sector products thus inducing a positive effect on growth. The transfer of simple skills through basic training and information would be the key to increased labour productivity and subsequent generation of employment in other sectors. Production methods in agriculture can also be improved by using material and financial resources already available in the continent. Capital intensive mechanized agriculture is irrelevant in most cases because it is not economically and socially advantageous while being technically difficult to maintain.

#### A. Note on Structural Adjustment

50. The macro-economic prescriptions of structural adjustment programmes overlook the social sectors and give no consideration whatsoever to the need to promote human welfare by sustaining employment, maintaining or increasing income levels, promoting education and health and reducing poverty. The primary objective of structural adjustment programmes is to increase the debt servicing capabilities of African countries by improving their balance of payment and reducing their budget deficit. A "healthy" domestic economy according to the proponents of structural adjustment programmes, is one which is in perfect equilibrium with the external sector. The social and welfare objectives within the domestic economy are of no consequence in structural adjustment programmes. Yet the responsibility of any government is first to pursue those policies that enhance the welfare of its national before turning to satisfy the needs of the "external sector." But this is not yet the case in many African countries. The gains made since independence in improving the social sector now appear to be threatened. Because of the cuts in government spending in the area of education the quality of education is falling. Because of the freeze on salaries and public sector employment, the layoffs and the general worsening of employment

conditions, a greater deal of hardship has been imposed on millions of workers. Levels of poverty have actually increased within Africa.

51. Agricultural pricing policies of structural adjustment programmes may not have any significant important rural employment and productivity. The prevalence of dualism in African agriculture and the the well-known tendency to support the cash sector in preference to the food sector, may mean that the application of price policies mainly to the export crop sector may serve as a disincentive to food production and shift labour to the cash sector whose productivity in value terms has been declining since 1980. It is not certain how this policy would work to raise productivity, increase food self-sufficiency and reduce poverty.

52. The African planner has a responsibility to fulfil towards the African people. He must ensure that any development policies and programmes being pursued, serve the interest of the people. That structural adjustment programmes do have harmful effects on human welfare, is a fact that even the IMF and the World Bank have now conceded. The challenge to Africa's development planners is how to remove these negative impacts of structural adjustment programmes and bring about increases in employment and incomes, the reduction of poverty and the restoration of productivity and food self-sufficiency in agriculture. In this connection the absence of a system to monitor, review and evaluate policies, programmes and projects from the view point of their impact on the human dimension is greatly regretted. Governments are urged to take the necessary action to put such a system in place.

#### Proposal for Action

53. A basic constraint on recovery and development in African countries is the systematic approach to human resources, particularly employment planning. In this paper, it has been argued that it is now most essential to give topmost priority to activities which enhance human resources utilization in the formulation of socio-economic development strategies and programmes. This has to be shared by all concerned at all levels of planning and decision making in the central planning organs as well as in the sectoral ministries.

54. In order to alleviate the present situation without delay and to arrest the rapid growth of unemployment in Africa, planners should ensure that every public or private sector development investment proposal contains quantifiable employment generation targets which would significantly contribute to the reduction of unemployment. In proposing, say, an irrigation project, it should be specified to the planner what labour requirements will be called for. This specification should be made by skill categories, right from low skill construction workers to middle-level skilled operators and project management personnel.

An attempt should also be made to determine the approximate indirect labour demand that would be generated in other industries such as construction, materials production etc. This could be done, using the logistics and procurement plans accompanying the project proposal. It is absolutely necessary to consider cost and benefit of a given project in terms of its employment-generation potentials both directly and indirectly, in addition to the cost-effectiveness of the final outputs of the project for socio-economic development and for further employment creation. A high employment generation potential of a given project should be one major criterion on which to base decisions on investment and project approval.

55. In many African countries, project and investment decisions are taken almost on an ad\_hoc basis. Various sectoral ministries, foreign governments and companies, international organizations present proposals to governments, whose feasibility is assessed solely on the basis of the amount of financial resources -- foreign exchange -- that these projects would bring into the country. If any meaningful efforts should be made to reduce unemployment in African economy, the major consideration for the approval of projects should focus on the employment effects it would have on the economy.

56. To this end, a system should be established within the central decision making organ of government, preferably in the Ministry of Planning, to review semi-annually all project and investment proposals on the basis of cost effectiveness in terms of employment generation. In so doing, all proposals should be accompanied by an analysis of their implications for employment creation with clearly stated numerical target on the employment generation per unit of investment.

57. The advantage of instituting such a systematic review is that it provides planners the basis for project appraisal and for making the appropriate recommendations for project approval.

58. African governments must keep in mind the fact that the present and future rates of population growth within the continent demand the creation 280 million new permanent jobs through the next twenty years just to keep employment constant at present levels. Therefore, it is absolutely essential at this stage for African governments to pursue investment strategies which have, as a central objective, the generation of employment for a growing labour force. Under the present economic situation and the structural adjustment programmes, human resources planners are required to assume a major role in formulating strategies to improve human resources utilization and increase employment. Approaches for planning human resources have to become more positive, active and creative to support the better utilization of human resources which are Africa's most precious endowment and the most powerful engine available for socio-economic transformation to occur.