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REVIEW AND APPRAISAL OF SOCIO-ECONOMIC SITUATION IN AFRICA IN 1978/1979 AND THE 1970s AND THE PROSPECTS FOR THE 1980s

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I. REVIEW AND APPRAISAL OF SOCIO-ECONOMIC SITUATION IN 1978/1979 AND THE 1980s *

Introduction

1. The 1978/1979 Survey of Economic and Social Conditions in Africa is published in two parts. Part I consists of two sections. The first is divided into eight chapters which cover such topics as the African development strategy during the Third United Nations Development Decade; the international economic situation; growth, domestic savings and fixed capital formation in developing Africa; agriculture, manufacturing; external trade and balance of payments; resource flows and external debt; and monetary developments and inflation. The second section contains a special study on economic growth, employment, income distribution and mass poverty in African developing countries. After reviewing the economic developments in the ECA region during the past two decades, the study discusses the concept of social justice and income distribution, followed by detailed estimates of mass poverty in the ECA region and some major policy issues. This is then followed by a review of the approaches to social justice developed within the United Nations family and finally the approaches propounded in the national development plans of many ECA member countries for employment promotion and the eradication of mass poverty.

2. Part II of the Survey covers current economic developments and policies in the individual countries of the ECA region, mainly emphasizing the years 1978 and 1979.

Development Strategy for Africa during the Third United Nations Development Decade

3. The International Development Strategy for the Second United Nations Development Decade contained a number of policy instruments specified, some of which were too sweeping to quantify, which was far less than the number of objectives. The Strategy dealt not only with sovereign States keen to maintain full sovereignty over their policies but also with Governments which could not be fully committed to specific policy actions at both the domestic and the international levels. The countries covered are heterogeneous in their levels of development and factor endowment and sometimes contradictory in interests. Hence the Strategy formulated was aspirational in character lacking contractual commitments, with no provisions for contingencies and unforeseen circumstances, assuming continued dependence of developing countries and continued improvement in the general international economic situation with its pull effect on the growth in the developing countries and finally assuming that such growth in developing countries would trickle down to the poor masses in these countries. The developing countries were taken as a group with few special measures to deal with the least developed or low-income countries.

4. As a result of the vagueness of some of the objectives and the insufficiency of policy instruments and political commitments, a number of resolutions were subsequently adopted by the United Nations fora. These resolutions reiterated the necessity of establishing a new International Economic Order which was not just a refurbishing of the old economic order

but a new set of relationships based on mutual interest and respect among nations with greater equity not only in terms of narrowing the gaps in levels of living but also in terms of a fairer sharing of wealth, power and decision making. They also underlined the importance of co-operation among developing countries and self-reliance and self-sustained growth at the national, regional and international levels.

5. At the fifth meeting of the Conference of Ministers of the Economic Commission for Africa held in March 1979, it was proposed that for Africa the new international economic order and the International Development Strategy for the Third United Nations Development Decade should serve the following objectives:

(a) The establishment of self-sustaining, internally located processes of development and economic growth at the national and/or multinational levels;

(b) Subregional and regional collective self-reliance;

(c) Development of human resources to ensure their greater participation in the development process;

(d) Broad-based participation in the development process concurrent and consistent with equitable distribution of the gains of socio-economic development;

(e) Acceleration of the industrialization process on the continent in the context of the social and economic environment of each country and not as a simple importation of foreign industrialization patterns.

6. The broad targets of the Strategy for the Third United Nations Development Decade should include: self-sufficiency in food supply, the establishment of a sound industrial base with special emphasis on the development of the requisite national industrial and technological policies, capabilities and institutional infrastructure as well as intra-African co-operation in order to permit the industrial take-off of Africa; the physical integration of the African region through the development of transport and communications at the national, regional and international levels; the control and establishment of sovereignty over natural resources; beneficial and equitable international relations; a substantial increase in intra-African trade, and the control of technology and the development of indigenous centres for technological training and research. The Strategy asserted that the development of human resources would be the main instrument to achieve these objectives and in particular the development of technical skills in which Africa was seriously deficient.

7. In response to the specific request contained in General Assembly resolution 3508 (XXX) and the subsequent Economic and Social Council resolution, the Economic Commission for Africa has evolved a preliminary specification of a standard projection model for African countries under alternative sets of development scenarios. This projection exercise aims at (i) analysing the structure of individual country economies so as to facilitate the implementation of the national and international development strategies by making

available to planners country-specific implications of a variety of structural and policy parameters, both national and external; and (ii) eventually assisting member Governments in project preparation at the micro-level. Following the suggestion of the seventh session of the Conference of African Planners to adapt the model to the specific characteristics and problems of individual African countries and other comments and suggestions, the ECA secretariat revised the standard projection model. Three separate types of models were designed to reflect the special characteristics of the least developed African countries, the major-oil exporting countries, and the non-oil-exporting and non-least developed African countries, the latter being further subdivided into three groups according to the level of per capita GDP in 1970. These projection models were developed with a view to (a) bringing out the interconnexions of the basic macro-variables and estimating their relationships quantitatively so as to be able to monitor the structure and performance of the economy and to chart its likely future course; and (b) developing alternative normative scenarios and deriving the policy measure that seem important in directing the course of the variables in desired directions.

8. Two scenarios, namely the historical trend scenario and a planned scenario, were analysed. According to the historical trend scenario results, developing Africa as a whole was forecast to grow in terms of real GDP by around 5 per cent in the 1980s. Agriculture would grow by about 2.5 per cent - less than the projected population growth. Serious disparities in economic performance would continue as in the past between major oil- and non-oil-exporting countries and countries classified by income group with mounting social tension in low income countries and widespread mass poverty.

9. The planned scenario results show that developing Africa could, given a number of structural and policy changes, attain a target growth of around 7 per cent in the 1980-1990 decade. This growth would necessitate an increase in agricultural output of 4 per cent and manufacturing would have to grow by about 9.5 per cent.

10. The major policy implications which emerged from the projections include an average annual growth rate of agricultural output of 4 per cent: increased investment in the rural sector including improved rural infrastructure development in feeder roads; adequate pricing policies aimed at increasing rural income; improving the rural-urban terms of trade, comprehensive land reform policies, expansion of cultivable land area; increased labour intensity and strengthening the link between agricultural research and rural production. In the manufacturing sector, the targets include an average annual rate of growth of 9.5 per cent in manufacturing output; the utilization and exploration of alternative energy sources; and increased expansion of transport by over 6 per cent yearly including road, rail and maritime transport.

11. As regards the least developed African countries, two types of policies emerged as being important to attain accelerated development, namely an immediate Action Programme for the utilization of existing capacities and a substantive New Programme of Action for the 1980s aiming at transforming their economies towards self-sustained development and production of their basic requirements.

The world economic situation

12. To measure the possible economic out-turn of the African region, it is of particular importance to have some assessment of the situation of the world economy as a whole, and in particular of the economic performance of the OECD countries since these are the major trading partners of the African developing countries.

13. In the OECD countries, the slow recovery from the trough of the 1974-1975 recession continued in 1979 but as the year progressed it was evident that growth in 1980 was likely to decelerate substantially with serious implications for developing Africa in that year. In 1976 real GDP/GNP grew at 5.1 per cent but this rate fell substantially during 1977 and 1978 to a yearly average of 3.7 per cent. Lower growth rates are forecast for both 1979 and 1980 at a figure of 2 per cent or less. This is a disheartening picture compared with the high average annual growth rate of real output of these countries of 4.6 per cent achieved during 1962-1972 and an average of about 5 per cent yearly realized during the 1950s. These adverse developments are projected to lead to a further deterioration in the balance of payments on current account of developing African countries in spite of the expected cuts in the volume of imports which would impair their ability to expand the level of fixed capital formation required for future growth.

14. Generally the trends in world trade and in the balance of payments of most countries have not been very healthy in the past years, and in 1978 world trade in volume terms increased by a mere 4.3 per cent which is far below the trends of the 1960s and significantly less than the 6.3 per cent a year recorded between 1970 and 1976. It is thus apparent that the momentum of increasing world trade was already retarded even before the occurrence of the 1979 oil price increase. The share of the industrialized countries in the value of total world trade has declined since 1970 from 72.4 per cent to 68.2 per cent in 1978 while for the developing countries as a whole the share increased from 19.1 per cent to 23.6 per cent over the same period. This latter increase however has been primarily due to the oil-exporting developing countries whose share in world trade increased to 10 per cent in 1978 compared with 5 per cent in 1970 while the non-oil-exporting developing countries accounted for 13.6 per cent as compared with 14.1 per cent in 1970.

15. The terms of trade of the industrialized countries based on 1970 figures recovered slightly from 88 in 1970 to 91 in 1978. For the non-oil-exporting countries, there was a deterioration from 100 in 1977 to 94 in 1978 and this is likely to continue through 1979/1980. The oil-exporting countries also experienced some deterioration in their terms of trade from the particularly sharp rise recorded in the period 1970 to 1975 and 1976 and 1977. The terms of trade declined from 320 in 1977 to 290 in 1978 although this figure is expected to change substantially in 1979 and 1980.

16. These unfavourable trends were particularly felt by the non-oil-exporting African developing countries. In 1978 demand and prices continued to be weak for a number of important commodities including coffee, cocoa, cotton, sisal and tea. Average prices for copper exports improved slightly in 1978 in both

Zambia and Zaire over the corresponding period in the preceding year but failed to bring any marked improvement in the countries' balance-of-payments position mainly because of the disruption of the transport systems. In both these countries a foreign exchange crisis has led to a cut in essential imports and general slow-down in economic activity. Following the poor world market for phosphates, the major producers - Morocco, Senegal, Togo and Tunisia also saw reduced export earnings. In Tunisia and Morocco, exports of textiles to EEC countries had to be curtailed because of protectionist trade measures. In Nigeria, which is a major oil-exporting country, production of oil fell by 9.2 per cent and exports by 14.4 per cent.

17. With respect to inflation, prices in the industrialized countries, judging by the GNP deflator, rose at an average annual rate of about 13.5 per cent in the second half of 1974 and 7 per cent in the first half of 1976 but remained at the same rate in every semi-annual period up to 1978. In a large number of countries, declines in oil prices expressed in terms of local currencies, coupled with the general weakness of prices of imported primary commodities, contributed to the slowing down of inflation. The major oil-exporting countries have been more successful in curbing the high rates of consumer prices that prevailed in the middle of the decade mainly because of the recent introduction of policies destined to restrain demand.

18. The record of the non-oil-exporting developing countries in Africa with respect to inflation has been disturbing. While the average annual rate of growth of consumer prices amounted to less than 5 per cent yearly in 1967 to 1972, it rose to some 15 per cent yearly during the years 1976 to 1979. The excessive rates of inflation in the non-oil-exporting African countries partly emanated from the rising costs of imported products and partly from over expansionary fiscal programmes and excessive rates of monetary expansion. In order to cope with these adverse developments tight fiscal and monetary policies had to be adopted both to curtail the level of imports and to fight inflation which was being fueled by wage increases and, in particular, ill-timed increases in real wages unaccompanied by productivity gains in a period when the terms of trade were deteriorating. Only partial data are available for 1979 but there are some indications of falls in the rate of increase in consumer prices in a large number of African countries. However, the excessive increases in consumer prices prevailing in Ghana, Uganda and Zaire are still exerting substantial influences on the average for developing Africa as a whole.

19. The world economic outlook for 1979 and 1980 is one of sluggish economic growth, high rates of inflation and a spread of protectionist trade measures in the industrialized countries. In particular, the steep run up in oil prices during 1979 is expected to have generally depressive effect on economic growth of the industrial countries which will have some impact on the growth prospects of the non-oil-producing developing countries. This in essence suggests that the present array of problems facing the industrial world as propounded in the <u>IMF Annual report 1979</u>, "precludes simple prescriptions offering promise of early success, but rather point to the need for pursuit of a many-sides strategy of policy in a medium-term framework".

20. While the non-oil-producing developing countries should themselves adopt better domestic policies in order to deal with the very difficult situation they now face, their problems could also be mitigated by actions on the part of industrial countries. For instance, the bulk of the new indebtedness incurred by the non-oil-producing developing countries comes from borrowing on less favourable terms in international financial markets, so that debt service charges are now rising faster than export earnings. Thus here is one avenue for active intervention by the industrial countries in the form of expanded flows of capital and aid to the developing countries along with measures to improve market access to their exports.

Growth, domestic savings and fixed capital formation

21. According to the provisional estimates prepared by the ECA secretariat, GDP at constant prices in developing Africa as a whole rose in 1978 by 4.6 per cent compared with 5.3 per cent in 1977, 6.9 per cent in 1976 and 3 per cent in 1975. The preliminary information for 1979 points to a growth rate of some 5.5 per cent. The average annual rate of real GDP for the years 1975 to 1978 was 5.6 per cent compared with an average of 4.7 per cent attained during the years 1970-1975. This relatively improved development performance is encouraging considering the continued world recession which has adversely affected the exports of the developing African countries. The modest acceleration in the past three years is partly ascribed to the increased inflow of external assistance and partly to the increased efforts made by African developing countries both to stabilize their economies and to utilize existing capacities in agriculture and industry more effectively.

22. However, the above averages, satisfactory as they seem, conceal serious disparities in the performance of African developing countries classified into oil and non-oil-exporting countries and the disparities are even wider if countries are classified according to per capita income groups.

23. While the major oil-exporting countries and those with higher per capita income ranging between $US 300 and $US 400 in 1970 achieved annual growth rates of 7.6 per cent and 5.5 per cent respectively during the years 1970 to 1978, the non-oil-exporting countries of Africa achieved much more modest average annual increases of a mere 3.8 per cent or 1.1 per cent on a per capita basis during the same period. Countries with GDP of less than $US 100 per capita in 1970 achieved an average annual growth rate of real GDP of a mere 3.1 per cent yearly or only 0.5 per cent on a per capita basis during the same period.

24. The annual growth of real GDP for the major oil-exporting countries however has been tapering off since the record growth of 12.6 per cent in 1976 mainly because of a series of stabilization measures introduced to curtail their overheated economies which resulted from the substantial expansion in fixed capital formation and government consumption expenditure following the large rise in oil prices in 1973. This had culminated in high levels of inflation and deterioration in the balance-of-payments position for a number of these countries, which resulted also from the subsequent slow growth rates in the volume of their petroleum exports. On the other hand, the growth rate of real GDP for the non-oil-exporting countries has been showing some acceleration owing to their efforts to rehabilitate agriculture and to utilize existing capacities in manufacturing after the serious drought which affected many countries in 1975.

25. On the subregional level, North Africa achieved the highest growth rate of real GDP with a figure of 6.9 per cent yearly between 1970 and 1978 followed by West and East Africa with 5.4 per cent and 2.6 per cent respectively. In Central Africa annual growth rate of real GDP amounted to a mere 1.1 per cent and there is a tendency for the rate of decelerate seriously to negative rates.

26. For developing Africa as a whole the degree of self-reliance, judging by the share of domestic savings in GDP, improved slightly and rose from 17.6 per cent in 1977 to 19 per cent in 1978. These averages however conceal different performances in the domestic savings efforts between the major oil and non-oil-exporting countries.

27. Following the substantial expansion in fixed capital formation and increased consumption expenditure by the major oil-exporting countries, the share of domestic savings in GDP declined from 28.4 per cent in 1970 to 15.5 per cent in 1975, reflecting a negative marginal propencity to save of 0.15 per cent during those years. However, as a result of a series of stabilization measures introduced in recent years, the share of domestic savings rose to 22.8 per cent in 1978 which implies a positive marginal propensity to save of 0.51 per cent.

28. For the non-oil-exporting countries, the share of domestic savings in GDP rose from 14.9 per cent in 1970 to 15.6 per cent in 1975 and 16.9 per cent in 1978. Consequently, these countries boosted their marginal propensity to save from 0.19 in the period 1970 to 1975 to 0.27 in 1975 to 1980. However those countries with low <u>per capita</u> income particularly those with GDP of less than $US 100 in 1970 experienced serious declines in their share of domestic savings and their marginal propensity to save fell from a positive of 0.15 during the period 1970 to 1975 to a negative 0.18 during 1975 to 1978.

29. For developing Africa sa a whole, the share of fixed capital formation in GDP rose from 17.9 per cent in 1970 to 24.7 per cent in 1975 and 26.4 per cent in 1978. Here again there were some disparities in performance. While the share of fixed capital formation in GDP rose enormously in the major oil-exporting countries from 21.6 per cent in 1970 to 38.8 per cent in 1975 and 41.2 per cent in 1978, the share of fixed capital formation in GDP in the non-oil-exporting countries stood at 15.1 per cent in 1970, 17.6 per cent in 1975 and 18 per cent in 1978. While the modest share of fixed capital formation in the major oil-exporting countries between 1975 and 1978 can be ascribed to measures taken to curb their overheated economies, that of the non-oil-exporting countries is partly due to increased domestic savings efforts and partly to large inflows of external assistance.

30. The significant decline in the capital/output ratio for the non-oil-exporting countries reflects the increased efficiency in capital investment and the relative success in the measures adopted to utilize existing capacity.

31. In summary it can be stated that the recent acceleration in the growth of real GDP between 1975 and 1978 as compared to 1970 and 1975 stems from accelerated savings ratios, increased fixed capital formation, lower capital/output ratios, reduced import elasticities with respect to GDP and increased export efforts supplemented by expanded foreign capital inflows.

32. Data for 1979 are not available, but the preliminary and incomplete information available late in 1979 and early in 1980 point to an average annual real growth in GDP of 5.5 per cent for African developing countries as a whole. But, behind this 5.5 per cent growth rate projected for 1979, there will be accelerated growth in the oil-exporting countries and a deceleration in the rate of real expansion in the non-oil-exporting African countries, particularly the least developed and low income countries. Thus, the prospect for 1979 in this group of countries is for continued stagnation in real per capita income against an increase of a mere 1 per cent achieved yearly for the years 1970 to 1978. The hope for the reversal of the trends which began in 1975 does not seem bright.

Agriculture

33. The year 1978 was better than average with the index of agricultural output based on value added prepared by ECA recording an increase of 2.9 per cent for the region as a whole compared with a mere 1 per cent in 1977. The greatest increase was in food production which went up by 4.5 per cent in 1978 compared with the long-term trend of 1.9 per cent attained in 1970-1978. While cereals production, which is very sensitive to weather conditions grew at a rate of 12 per cent, roots and tubers production grew at the more modest rate of 1.9 per cent.

34. The output in 1979 however was below normal. According to the early warning system of FAO there were widespread unfavourable crop conditions in many parts of West, Central and Eastern Africa during 1979, and they are likely to have affected output unfavourably and reduced the growth to rates below the long-term trend. The average annual growth rate in agricultural value added at constant prices between 1970 and 1978 was 1.6 per cent a year according to ECA estimates while growth according to the FAO production indices was 1.4 per cent a year. The rates of growth in food and agricultural production were far below the 2.7 per cent population growth to speak nothing of the increase in per capita income. Self-sufficiency ratios in food production declined seriously and imports of foodstuffs increased substantially, thus imposing a heavy burden on the balance of payments of African developing countries. For developing Africa as a whole, food imports have been growing by 9.6 per cent a year during 1970-1978 against 2.7 per cent only for exports.

35. What is even more disturbing is that there were wide disparities in performance. In 1978, North Africa's agricultural value added increased at constant prices by 4.7 per cent while that of West Africa rose by 3.5 per cent. East Africa attained a growth rate of a mere 0.6 per cent and Central Africa a mere 0.9 per cent. For the 1970s as a whole the average annual growth in agricultural output was 3.8 per cent for North Africa, 1.5 per cent for East Africa, 0.9 per cent for West Africa and a negative growth rate of 0.6 per cent for Central Africa.

36. In recent years a number of African developing countries have been promoting the establishment of agricultural institutions and pursuing policies to achieve self-sufficiency in staple food stuffs and reduce the vulnerability of their economies to the vagaries of markets for a few export commodities.

Key element of the agricultural policies introduced include the provision of subsidized agricultural services and supplies such as fertilizers, farm implements, improved seeds, extension services, easy credit, farmers training and seed multiplication centres, transport, storage and marketing facilities. An additional element has been the selective setting of producer prices at remunerative levels so as to stimulate farmers' initiatives and encourage specific crop production and increases in rural incomes.

37. In Benin and Mali for example, significant investments were injected in agriculture with the intention of harnessing the countries' water resources and offsetting irregular rainfalls, improving yields and promoting crop diversification. In Somalia, the Government's agricultural policy has been primarily geared to the production of staple foodstuffs by 1980 and, thereafter, to produce surpluses for export. At the same time, it is intended to reduce reliance on dry-land farming by expanding irrigated cropland in order to mitigate the impacts of future droughts. In Swaziland, the Governmet has introduced some limited tax measures designed to encourage landowners to cultivate idle land or sell it. In Mali and the United Republic of Tanzania, a reserve stock of grains is being built up with a view to protecting the population against further droughts.

38. While the efforts made so far by a number of African developing countries to boost agriculture production should be commended, it is however, in the use of agricultural inputs (fertilizers, tractors and irrigation measures) that developing Africa has failed to show marked improvements. While average fertilizer consumption in Africa was 9 kilogrammes per hectare of arable land in 1977, it varied significantly among the different subregions. For instance North Africa, consumed ten times more per hectare of arable land than West and Central Africa. In some countries (Ghana, the Ivory Coast, Senegal, the United Republic of Cameroon, Angola, Kenya, Mauritius and Swaziland) large quantities of fertilizers are used on export crops rather than on staple food-stuffs.

39. The number of tractors in use in developing Africa increased from 175,700 in 1970 to 249,600 in 1978 or at an average rate of 4.5 per cent per annum. In 1978, 62 per cent of these tractors were concentrated in North Africa compared with 28, 7 and 6 per cents in East and Southern, West and Central Africa respectively. While there is one tractor for 220 hectares of arable land in North Africa, the ratio is one for 5,245 hectares in West Africa, one for 2,155 hectares in Central Africa and one for 790 hectares for East and Southern Africa.

40. Developing Africa, outside North Africa had an average of 46 square metres of irrigated land <u>per capita</u> in 1978 as against 680 square metres in North Africa.

41. In summary, whatever the yardstick used for this purpose, intensification of agriculture (use of fertilizers, tractors and irrigation) is much more advanced in North Africa than in the other subregions. Notwithstanding this fact, however, North Africa is still the largest importer of cereals and has the lowest self-sufficiency ratio in food. All indicators in fact seem to show that the potential for increasing food production in the rest of Africa

is much higher since the other subregions outside North Africa have barely started to apply more intensive methods to the production of basic food-stuffs.

Manufacturing

42. In 1978, manufacturing output rose by about 8 per cent for developing Africa compared with 7.7 per cent in 1977, 9.7 per cent in 1976 and 6.7 per cent for the years 1970 to 1978. The prospect for 1979 is for some acceleration but these averages conceal wide disparities in performance among the African developing countries classified into major oil and non-oil-exporting countries and by the 1970 per capita income groups. While the major-oil-exporting countries and those with higher per capita income ranging between $US 300 and $US 400 achieved average annual growth rates of 11.7 per cent and 7.2 per cent respectively during the years 1970 to 1978, the non-oil-exporting countries of Africa achieved an over-all annual growth rate of 5.1 per cent during the same period. The gap becomes even more serious if the growth of manufacturing output in the lowest income group of countries with a per capita GDP of less than $US 100 which rose at a mere 3.7 per cent during the years 1970-1978 is taken into account.

43. On the subregional level, West Africa achieved the highest growth rate of manufacturing output of 9.3 per cent yearly between 1970-1978 followed by North Africa with 6.7 per cent yearly. The rates of growth of manufacturing output in Central and Eastern Africa were 1.6 per cent and 4.6 per cent respectively during the same period.

44. Behind the recent accelerated expansion in manufacturing output are the active rehabilitation and stabilization measures designed to utilize existing excess capacity more effectively. Another important factor in the expansionary trend is the relatively large increase in agricultural production in 1978 with an important part of manufacturing being agro-based. Furthermore, the high level of investments undertaken in a large number of countries, particularly in the oil-exporting ones assisted considerably in raising the level of fixed capital formation. The volume of investment undertaken by some non-oil-exporting African countries has also been substantial such as the Ivory Coast, the United Republic of Cameroon, Kenya, the United Republic of Tanzania and Malawi.

45. In some countries, there is a shift away from import substitution towards export-oriented industries as the limits of the internal market are reached. A large number of others have set up industrial promotion agencies and have made elaborate investment codes. With the pressure of unemployment, there is now a tendency to prefer labour-intensive industries over capital-intensive industries. Greater attention is also being given to the profitability of industrial ventures, especially in those countries where the State sector accounts for a large share of industrial output but has not brought about the expected benefit. One important endeavour in the development of manufacturing industry in African developing countries is in the area of industrial co-operation, as can be seen from the joint venture between Togo, Ghana and the Ivory Coast to build a joint cement clinker plant. Another example of industrial co-operation is the one taking place under the framework of the Mano River Union between Sierra Leone and Liberia. It is hoped that the

creation of the ECOWAS to which a large number of West African States have adhered, will be instrumental in speeding joint projects and industrial co-operation.

46. Despite the efforts made by a number of African countries to speed up the process of industrialization, growth is being constrained by a number of factors. Among them are the lack of capital, the limited size of the markets, the shortage of managerial and technical skills, overvalued exchange rates, protectionist policies in developed countries, extended delays in deliveries of raw materials arising from congested infrastructural facilities and failure to utilize capacity effectively, shortages of power, the high level of wages, and deterioration in the balance of payments which has led to the restriction of imports of both raw materials and spare parts.

External trade and balance of payments

47. The volume of world trade rose in 1978 to $US 2,419.9 billion compared with $US 2,081.3 billion in 1977, an increase of 15.8 per cent at current prices and 4.3 per cent in volume terms with unit values recording an increase of 10.8 per cent. The increase in volume was disappointing and below the average level recorded since 1975.

48. While exports from developing Africa declined from $US 47.8 billion in 1977 to $US 46.2 billion in 1978, imports increased more from $US 49.3 billion to $US 57.1 billion during the same period. The trade deficit of $US 1.5 billion recorded in 1977 sharply rose to $US 10.9 billion in 1978. While export volume declined (1970=100) from 102 in 1977 to 101 in 1978, the volume of imports rose from 192 to 205 during the same period. Import prices rose by 8.6 per cent while export prices showed a fall of nearly 3 per cent so the terms of trade deteriorated from 159 (1970=100) to 143 or by 10 per cent.

49. For the major oil-exporting countries, exports declined from $US 28.6 billion in 1977 to $US 26.9 billion in 1978 or by 5 per cent while imports rose from $US 22.8 billion to $US 27.2 billion during the same period. Consequently, the major oil-exporting countries registered a trade deficit of some $US 0.3 billion in 1978 compared with a trade surplus of $US 5.7 billion in 1977. Their export volume declined from 96 (1970=100) in 1977 to 93 in 1978 and their terms of trade deteriorated from the figure of 269 (1970=100) recorded in 1977 to 242 in 1978.

50. For the other developing African countries, exports increased from $US 19.27 billion in 1977 to $US 19.30 billion in 1978 while imports rose from $US 26.4 billion in 1977 to $US 29.9 billion in 1978. Consequently, the deficit on merchandise trade rose from $US 7.2 billion in 1977 to $US 10.7 billion in 1978. The unit value of exports fell by 2 per cent while for imports there was a rise of 8.6 per cent. Thus the terms of trade (1970=100) fell from 100 in 1977 to 90 in 1978.

51. Crude petrolume exports from developing African countries fell in volume and there were also substantial falls in the prices of the three beverage

commodity exports - coffee, cocoa and tea. Up to 1977 the oil-exporting countries had managed to raise their export volume substantially from the low point of 1974 but in 1978 there was a fall in the quantities of crude petroleum exported of about 3 per cent. The years 1979 and 1980 will see high surpluses in the major oil-exporting countries but for the remaining countries taken as a group the large deficit which has been a feature of the trade scene since 1975 will widen despite increased prices for certain important commodities exported from the region.

52. The trade pattern of the African region continues to be characterized by various concentrations. Firstly, over 80 per cent of both exports and imports are handled by only 12 countries of the region, four of which are oil-exporters. Secondly, export trade is concentrated on a relatively small range of primary commodities and, thirdly, most of the trade is conducted with the developed market economies which, in 1978, accounted for 83.6 per cent of the region's imports. Intra-African trade showed a disappointingly slow growth of only 7.3 per cent between 1975 and 1978 compared with an increase of 41 per cent in total exports from the region. The disappointing record of intra-African trade can be partly ascribed to the poor intra-African communications systems, trading practices and institutions which are geared to overseas trade and to the inconvertibility of African currencies.

53. Over all, the balance-of-payments situation in 1978 was in marked contrast to 1976 and 1977. The major oil-exporting countries in Africa recorded a large deficit of $US 5.8 billion on the goods and services which was covered by a large inflow of capital amounting to $US 3.5 billion and by the running down of international reserves. The prospects for 1979 and 1980 are for large surpluses. For the non-oil-exporting African countries, the net deficit on goods and services in 1978 was about $US 9.6 billion as compared with $US 7.6 billion in 1977. The outlooks for 1979 and 1980 are for larger deficits. The deficit in 1978 was covered by private transfers amounting to $US 0.3 billion, official transfers and grants totalling $US 2.45 billion, net capital inflow of $US 5.9 billion and a reduction in international reserves.

Resource flows and external debt

54. The total net flow of resources to developing countries as a whole rose from $US 19.72 billion in 1970 to $US 80.04 billion in 1978 or at an average annual rate of 19 per cent at current prices and at 8 per cent per annum at constant prices. During the 1970s official development assistance (ODA) rose at current prices at an average annual rate of 13.5 per cent yearly while non-concessional assistance rose to 22.6 per cent yearly with the result that the share of ODA in total flows declined substantially from 44 per cent in 1970 to 30 per cent in 1978. Furthermore, the 1970s saw a change in the sources from which the financial resources originated. While the share from DAC countries rose from 71 per cent to 77 per cent of total resources OPEC and multilateral agencies increased their respective shares from 3 per cent and 9 per cent in 1970 to 7 per cent and 12 per cent in 1978.

55. Generally speaking, there has been a hardening in the terms and conditions of resources flows to developing countries mainly as a result of the relatively rapid expansion in non-concessional flows. From DAC countries the share of

concessional flows, as measured by ODA, declined from 40 per cent of total resource flows in 1970 to 21 per cent in 1979. However, both OPEC countries and multilateral agencies increased their share of concessional assistance from 64 per cent and 61 per cent in 1970 to 68 per cent and 63 per cent in 1978 respectively.

56. The net flow of resources to developing Africa rose from $US 13 billion in 1975 to $US 19 billion in 1978, an average annual rate of increase of 13.5 per cent at current prices. At constant 1970 prices, the increase was a mere 2.6 per cent yearly between 1975 and 1978. In addition to the over-all slow growth, the share of ODA flows in both resource flows to developing Africa fell from 52.7 per cent in 1975 to 44 per cent in 1978, and at 1970 prices, there was an actual decline in ODA flows to Africa between 1975 and 1978. Africa's share in total resource disbursements to all developing countries declined from 28.6 per cent in 1975 to 26 per cent in 1978.

57. For developing Africa as a whole, there has been some hardening in the terms for loan commitments and grant elements in loan flows particularly in the period between 1970-1974. This is amply brought out by the decline in the average number of years of the maturity of loans to developing Africa (other than North Africa) from 25.2 years in 1970 to 19 years in 1977, and in the increase in the rates of interest from an average of 3.7 per cent in 1970 to 5.6 per cent in 1977. Furthermore, there has been a decrease in the grant element in total loans from 46 per cent in 1970 to 30 per cent in 1977 and a decline in the grace periods.

58. Both the oil-exporting and non-oil-exporting African countries registered increases in resources flows at current prices. For the non-oil-producing countries of Africa the increase in total resource flows at current prices was 30 per cent between 1975 and 1978 or 12 per cent yearly on average, although at constant prices there was no increase. The net flows to the oil-exporting countries rose from $US 2,154 million in 1975 to $US 4,859 million in 1978 with all the increase being due to the rapid increase in private capital flows which, at constant prices, increased by 71 per cent between 1974 and 1978 and accounted for 95 per cent of these countries' total receipts in 1978. The share of ODA from DAC countries and multilateral agencies received by the non-oil African exporting countries increased from 93.8 per cent of the total flows to African developing countries in 1975 to 97 per cent in 1978.

59. Over all, it is estimated that the external debt burden of developing Africa increased substantially during the 1970s. While developing Africa, excluding North Africa, owed $US 9.9 billion in 1974, the debt rose by an annual average of $US 2.5 billion a year and amounted to $US 17.4 billion by 1977. The external public debt service payment as a proportion of exports of goods and services has, as a consequence, risen very fast and is estimated to have been around 8 per cent in 1977. However, the external public debt service payment as a proportion of exports of goods and services for a number of individual countries is much larger than the African average. This is particularly true of Guinea (43.5 per cent), Egypt (22.8 per cent), Zambia (18.6 per cent), Algeria (15.5 per cent), the Ivory Coast (12.2 per cent) and Togo (11.8 per cent).

60. The same unfavourable trends reviewed above continued in 1979 with regard to both inflows of aid and the external debt burden of African developing countries. In countries such as the Ivory Coast, where the debt ratio had risen to 12.2 per cent in 1977 and where a large proportion of the money raised has been invested in public works projects with a low rate of return, the government attempted to restrain the incurring of new debt and to curtail public investments. In Gabon, despite its high oil revenues, a regorous austerity programme is being implemented to repay its debts.

Monetary developments and inflation

61. Taking the 34 countries for which monetary and price data are available, the average annual growth rates in money supply (defined as demand deposits, currency outside the banking system and quasi-money) accelerated substantially between 1970-1973 and 1973-1976. While five countries experienced an average annual growth rate in money supply of less than 20 per cent yearly during 1970-1973 the average annual rate of expansion exceeded 20 per cent in 27 countries during the years 1973-1976. The most recent data show that, owing entirely to the large decline in net foreign assets held by the banking system, the average annual rate of expansion in money supply was below 20 per cent in 18 countries in 1977 and in 17 countries out of 31 in 1978. This declaration seems to be continuing in 1979 partly because of deliberate policies taken to curb the growth of domestic credit.

62. Judging by the average annual increase in consumer prices, the rate of inflation has somewhat abated thanks partly to the fact that the unit value of imports in 1978 increased significantly less than in previous years. The average annual rate of increase in the weighted consumer price index, which amounted to about 12 per cent in 1976, rose to 14.3 per cent in 1977 but decelerated in 1978 and perhaps in 1979 marginally to 12.5 per cent. In 1976, consumer prices rose by over 15 per cent in nine African developing countries while the number of countries recording consumer price increases of over 15 per cent increased to 11 in 1977 but declined to 7 in 1978 namely, Algeria, Kenya, the Sudan, Ghana, Nigeria, the Upper Volta and Zaire.

63. With the increase in consumer prices during the years 1976 to 1979 amounting to an average annual rate of 13 per cent as compared with a rate of about 7 to 8 per cent in developed market economies, it seems that the competitive position of African exports vis-à-vis the developed countries continues to deteriorate and the over-valuation of currencies is being accentuated, thus encouraging imports, discouraging exports and widening balance-of-payments deficits.

64. The continuation of high inflation, albeit at a lower pace, created strong pressures for wage increases in almost all countries. Government workers and employees of the organized private sector which are covered by a protective legislation and in particular by minimum wage laws were the best situated to press for higher wages, and substantial raises were granted by a number of Governments. Particularly high increases were obtained in the Niger (30 per cent in 1978 and 35 per cent in 1979), in Ghana (the minimum wage was doubled in the civil services in 1977 and further rises of 20 per cent and 5 per cent were granted in 1978 and 1979), and in Morocco (the minimum wage was raised

by 30 per cent in 1979) but in most cases wages barely kept abreast with inflation, declining in real terms in many cases. In Ghana, the high wages were insufficient to make up for inflation losses. In Zaire, where prices have increased almost five times since 1975, the fall in the real wages of the urban workers has been severe as they cannot fall back on their own food production like farmers. On the other hand, Governments taking account of workers' grievances, have attempted to prevent the rapid wage increases which accentuated inflation and the competitive position of exports. In fact, some Governments have effectively frozen official rates of pay for a number of years as in the Congo where civil servants' pay has remained at the same level since 1975. In Ethiopia after large increases in the period of structural change in 1974/1975, wage rates have been strictly controlled. In the Ivory Coast, the Government granted increase in wages of 25 per cent in 1975, but in 1979 in an effort to curb inflation and preserve the position of its exports a raise of 10 per cent only was allowed in consultation with trade unions.

65. From January to October 1979, the International Monetary Fund approved stand-by arrangements and compensatory financing facilities for seven African developing countries, namely, Kenya, Uganda, Zaire, the Congo, the United Republic of Tanzania, Ghana and the Sudan as against the same number for the whole in 1978. The stablization programmes in most of these countries are aimed at curbing inflationary tendencies and reducing budgetary deficits in order to rectify basic balance-of-payments deficities.

<u>Economic growth, employment, income distribution and mass poverty in the African developing countries</u>

66. The 1978/1979 <u>Survey of Economic and Social Conditions in Africa</u> contains a special study entitled "Economic growth, employment, income distribution and mass poverty in the African developing countries". According to this study, as a result of the poor growth performance of national income, agriculture and industry, particularly in the middle- and low-income countries, the demand for labour grew at modest average annual rates. The position was compounded by the decline in labour intensity in both the manufacturing and the agricultural sectors. In the manufacturing sector the employment/output ratio declined, during the 1970s as a whole because of the slow growth in output, the shift towards some heavy industries and increased capital intensity.

67. In agriculture, labour intensity per unit of land has been falling in spite of the fact that the estimated elasticity of output with respect to labour in that sector was 0.76 compared with the elasticity of output with respect to acreage of a mere 0.33 which underscores the importance of labour intensity and the overhauling of the existing tribal land holding system in many African countries for increased output and employment.

68. The unemployed and the underemployed in the African developing countries are estimated at some 63 million persons or 45 per cent of the total labour force in 1975. While the demand for labour rose marginally during the 1960s and 1970s, the number of entrants into the labour force was increasing at accelerated rates as a result of the fall in infant and childhood mortality rates after World War II. With the spread of education during the last two

decades there was a shift in the composition of the unemployed, with growing proportions of them being the educated youth. This could sooner or later endanger the social edifice.

69. The study defines social justice as a change in the direction of increased economic equality. The objective is not to achieve absolute equality which would dampen incentives but to achieve an equality of opportunities. The often propounded conflict and trade-off between growth and equity depends upon the set of policy instruments which are available and able to solve the problems confronted. Many African countries do not master the application of the available policy instruments, to say nothing about the need for innovative new policy measures.

70. From the point of view of the welfare of the people of a country, emphasis is placed not only on income distribution but on the absolute level of a country's national income.

71. The study on income distribution reveals that (a) on a per capita basis, urban incomes are about three to four times those in the rural areas, which is quite high compared to the ratio of 1 to 0.8 in the developed countries; (b) disparities in expenditure are not as pronounced as those of income, which suggests that most of the family savings are generated in the urban areas. This tendency is likely to perpetuate income inequalities in the future; (c) income inequalities are consistently larger in urban areas as compared with the rural areas; (d) the distribution of income seems to have deteriorated in a large number of African developing countries; and (e) there seems to be some relationship between income inequalities and land distribution at least in the rural areas.

72. The poorest 40 per cent of the population in developing Africa as a whole had an income share of a mere 14 to 15 per cent of the total income, while the richest 20 per cent of the population shared 53 to 55 per cent of the total income among themselves. The share of the top 20 per cent of the population in developing African countries is about 10 percentage points higher than the share of the top 20 per cent of the population in developed countries. What is even more startling, is that the richest 5 per cent of the population in Africa account for one quarter of the total income or about double the share in total income of the poorest 40 per cent of the population.

73. About 40 per cent on the average, or about 147 million people, had a yearly average per capita income of about $US 130 at 1975 current market prices. These can be classified as "destitute" or seriously below the poverty line. The second income group forming 30 per cent of the total population or 110 million persons who had a yearly average per capita income of about $US 255 at 1975 current prices may be considered as "seriously poor", or on the verge of poverty. These two groups, the destitute and the seriously poor, together amounted to 257 million persons or some 70 per cent of the total population of developing Africa in 1975.

74. The great majority of the seriously poor seems to be the unemployed, the underemployed and those working on low productivity jobs together with their dependent family members. This conclusion emphasizes that mass poverty, income inequalities, unemployment, underemployment and employment on low-productivity and low-income jobs are associated with poor utilization of human resources.

75. The widespread poverty in developing Africa stems from the low level of per capita income. It should also be noted that the Gini coefficients show that income distribution in the least developed African countries is less pronounced than in the non-least African developing countries. Mass poverty in the least developed African countries is more widespread than in the non-least developing African countries, thus the root cause is the low level of per capita income rather than greater differentials in income distribution. Hence much larger GDP growth rates are essential in future for the satisfaction of the basic needs. Accelerated growth in the future should also be accompanied by distributive measures.

76. The study cautions that an international basic needs programme could degenerate into a global charity programme if it is not structured to encourage national self-reliance and self-sustainment. The approach should rather be directed to the ability of the country to produce its basic needs for itself. Of course, the present international order is a serious constraint to a country expanding its exports, output and employment, and it contributes to the underutilization of human resources. Indeed, a basic needs approach should take into full consideration the country's ability to expand its productive capacity so as to produce the basic goods and services needed nationally.

77. The study shows that the efforts so far being propounded in the national development plans of many African developing countries are of marginal utility in coping with the most serious problems of the day, namely poor utilization of human resources reflected in the rampant unemployment, underemployment and engagement in low-productivity jobs, income inequalities and mass poverty.

II. PERSPECTIVES OF THE AFRICAN REGION IN THE 1980s AND POLICY IMPLICATIONS**

78. On 15 December 1975 the General Assembly adopted resolution 3508 (XXX) calling for the examination of long-term trends in the economic development of the world regions. The resolution requested, inter alia, the regional commissions to prepare studies on long-term trends in and forecasts of the economic development of their respective regions taking into account the national development programmes of individual countries and the particular characteristics and priorities of the regions. In 1977, the Economic and Social Council adopted resolution 2090(LXIII) which, inter alia, recommended

** Summary and conclusions of document E/CN.14/737.

that the regional commissions should continue and further expand their studies of long-term trends in their regions in order to reach practical conclusions regarding the expansion of economic co-operation both on a regional and on an international scale. The Council affirmed that the regional commissions should bear in mind long-term prospects for the economic development of the regions of the world during the elaboration of the new international development strategy.

79. The Committee for Development Planning at its twelfth session 1/ reiterated the view that the study of long-term trends in and forecasts of the economic development would provide a useful framework for both a retrospective analysis and a forward look to help in designing and implementing appropriate development policies. At the thirteenth session, 2/ the Commitee elaborated on the mutual relationships among the various regions and examined methodological guidelines for further examination of the development trends in the regions. At the fourteenth session, 3/ the Committee envisaged and observed, inter alia, that there was a great variation in the nature and scope of the studies as well as in the methodologies used. In 1979, at its fifteenth session 4/ the Committee further elaborated that the provisional results of the quantitative perspectives suggested that an average annual rate of growth of gross domestic product for the developing countries as a whole above the 6 per cent target in the International Development Strategy for the Second Development Decade was possible, perhaps even rising to 7 per cent in the 1980s. The Committee considered the doubling of the per capita income of the low-income group of countries (including the least developed) by the year 2000 to be the most important objective. At its sixteenth session in 1980s, 5/ the Committee recommended various specific objectives which included a growth rate in GDP for developing countries of 7 per cent with a per capita growth of 4.5 per cent in the 1980s; agricultural expansion of 4 per cent, manufacturing output growth of 9 per cent, (9.5 per cent for low-income countries) export growth of 7.5 per cent and import of not more than 8 per cent.

80. In the ECA secretariat, the focal point for the elaboration of an International Development Strategy for the Third United Nations Development Decade was the preparation of an African Strategy. In March 1979, the fifth meeting of the Conference of Ministers and fourteenth session of the Economic Commission for Africa in Rabat adopted resolution 332 (XIV) on the development

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1/ Report on the Twelfth Session, E/5793.

2/ Report on the Thirteenth Session, E/5939.

3/ Report on the Fourteenth Session, E/1978/46.

4/ Report on the Fifteenth Session, E/1979/37.

5/ See Committee for Development Planning Report on the sixteenth session 7-16 January 1980, E/1980/3.

strategy for Africa for the Third Development Decade. According to this Strategy, as far as the African region is concerned, the new international development strategy should serve the following objectives: (a) the establishment of self-sustaining internally located processes of development and economic growth at the national and/or multinational level; (b) subregional and regional collective self-reliance; (c) development of human resources to ensure their greater participation in the development process; (d) broad-based participation in the development process concurrent and consistent with equitable distribution of the gains of socio-economic development; and (e) acceleration of the industrialization process on the continent in the context of the social and economic environment of each country and not as a simple importation of foreign industrialization patterns. The Strategy recommends that the priorities for the next United Nations Development Decade should include the attainment of regional self-sufficiency in food; the establishment of sound industrial base; the physical integration of the region through transport and communications; the development of capabilities required to establish sovereignty over the region's natural resources the attainment of a substantial increase in the present meagre 4 per cent share of intra-African trade in the total trade of Africa and the establishment of mutually beneficial and equitable relations between African countries and the rest of the world.

81. Further, in 1978, the ECA secretariat submitted to the seventh session of the Conference of African Planners the preliminary specifications and forecasts for a sample of eight African countries and the Conference was requested to make comments and suggestions. The Conference noted that the model was basically sound and useful. Suggestions made included the incorporation of social objectives in the model subject to the availability of data; the further disaggregation into sectoral variables wherever data were available; a more exhaustive examination of the agriculture sector and choice on appropriate base year. Also, the secretariat endeavoured to keep in constant touch with individual planning officials and to harmonize its work in the field of projections with the other agencies of the United Nations that were involved in the studies on long-term development trends.

82. Bearing in mind the various suggestions made at the seventh session of the Conference of African Planners and comments and suggestions from various other sources, the ECA secretariat revised the standard projection model and specified three separate types of models designed to correspond to and reflect the main characteristics of three economic structures namely the least developed African countries, the major-oil-exporting countries and the non-oil-exporting and non-least developed African countries which were further classified into three groups according to the level of <u>per capita</u> GDP in 1970.

83. The model developed for the least developed group of African countries 6/ was based on the production, consumption and trade structures generally

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6/ See "<u>Quantitative Analysis of the Problems and Perspectives of the African Least Developed Countries in the Framework of the Third United Nations Development Decade</u>" (ECA/CONF/LDCs/3).

characterized by (a) a large proportion of value added derived from agriculture with a concentration on a few agricultural commodities; (b) most of the fixed investment being in power, construction, transport and manufacturing; (c) the tertiary sector being dependent on output in the primary and secondary sectors; and (d) import levels being determined by availability of external resources but tending to increase with income. In agriculture, two approaches were tried. The first alternative obtains total agricultural value added through a log-linear production function with acreage and labour as the independent variables. The second alternative uses the quantities of the most significant commodities from which gross agricultural output and value added are obtained. The industrial sector output is obtained from the incremental capital output ratio with capital stock and value added in the service sector obtained as a function of the output in agriculture and industry. The traditional consumption function is used to estimate and project total and private consumption while Government consumption is given as the difference between the two. Investments are usually taken as a policy variable although in some cases a distinction is drawn between autonomous and induced investments. In these cases the later is estimated as a function of income. Exports are obtained from the export quantities of commodities in a particular country, while imports are obtained from the level of income and the value of the previous year's exports. The trade and savings gap are obtained from the appropriate identities and the more dominant of the two is identified.

84. The model for the non-least developed African countries is disaggregated in as many important sectors as the economy and data allow. The output of the agricultural sector is based on a production function with acreage and labour. In some cases, however, either a time trend or a commodity approach is used instead of acreage and labour. Value added in the mining sector is estimated either through the capital stock in mining or through the output of specific mineral products. In a few cases where only one or two mineral commodities dominate the mining output, an equation including a variable of international demand is attempted. Manufacturing is obtained from the capital stock in the manufacturing sector while construction is regressed on the volume of total investment. Value added in the service sectors, namely energy, transport and communications and other services, are regressed mainly on the total value added of the major productive sectors. Energy is related to the sum of value added in mining, manufacturing and construction. Transport is explained by the sum of mining, manufacturing, construction and energy and the ratio of urban population to the total population. Other services are obtained as functions of output in all the other sectors. Consumption and imports are obtained from total domestic product via the marginal propensities to consume and to import.

85. The model for the major oil-exporting countries is identical with that of the non-oil-exporting countries except for the separate and unique treatment of oil production and exports.

86. In Africa, econometric model building especially with respect to an entire national economy is still in its infancy. The objectives of the various models were (a) to bring out the interconnexions of the basic macro-variables and to estimate their relationships quantitatively so as to be

able to monitor the structure and performance of the economy and to chart its likely future courses; and (b) to develop alternative normative scenarios of the economy and derive the policy measures that seem important in directing the course of the variables as desired.

87. Naturally, the various models have limitations and are subject to a great deal of errors owing to the unrealiability of data and drastic changes and instabilities in some structures. Thus a pragmatic and critical approach is needed in appraising a model and its performance. Indeed quantitative models have to be supplemented by critical quantitative judgement to avoid mechanistic types of growth concepts. Other limitations of modelling include: (a) the problem of stability of parametres over a long-span of time; (b) the inability to incorporate in models potential but explicitly unknown resources since a discovery of even one resource (e.g. oil) can bring about drastic changes in an economy of a country and/or region; and (c) the problem of the limitations of a socio-political nature which can distort or change the stability and nature of the economic and behavioural relationships of the economy.

88. In many developing African countries the general lack of statistics and a basic economic data base constitutes one of the most serious problems in effective socio-economic planning and rational decision making. Similarly, in building econometric models at the ECA secretariat, the availability (in sufficient detail), accuracy and consistency of data were major problems. These problems limited the capacity to incorporate some basic details (like employment) in the models. Most of the statistical series were incomplete, short and needed intensive revisions. It was thus necessary, in addition to the ECA national accounts estimates, to consult various sources which include individual development plans, the ECA annual Survey of Economic and Social Conditions in Africa, FAO publications and various other statistical bulletins and publications. It is hoped that the projections will highlight the need to improve the statistical framework at the country level and also to encourage the use of statistics for development planning.

89. In this study two scenarios, namely a historical trend scenario and a planned scenario, are analysed. The planned scenario shows, given a basic structural and institutional framework, the consistent growth prospects of some key variables such as agriculture, manufacturing, consumption, external trade, etc., and some target growth. In the simulation of the planned scenarios, various assumptions were based on tje salient features of the African Strategy, particularly the objective of self-reliance and self-sustained growth, the necessity to increase agricultural and manufacturing output, the desirability of attaining substantial increases in per capita income and the potential increases in trade through the expansion of intra-African trade.

90. The review of the over-all performance of the developing African countries classified according to per capita GDP during 1970-1977 shows that there was a positive correlation between the per capita level and economic performance which implies that within developing Africa there was an increasing gap between the poorer and richer countries. The least developed countries grew

by 3.2 per cent yearly, the non-least developed and non-oil-exporting countries grew by 3.7 per cent and the major oil-exporting countries grew by 7.8 per cent yearly. In per capita terms the least developed countries had an average annual rate of growth of a mere 0.3 per cent, the non-least developed countries and non-oil-exporting countries had a per capita growth of about 1 per cent yearly while the major oil-exporting countries' per capita growth increased by about 3.8 per cent in the same period.

91. At the sectoral level, the major growth trends in the 1970-1977 period include: (a) the poor performance of the agricultural sector which, for developing Africa as a whole, grew by only 1.8 per cent per annum; (b) the industrial sector, which expanded faster in the richer countries with the major oil-exporting countries growing by as much as 13 per cent per year as compared to 3.9 per cent and 4.3 per cent for the least developed and non-least developed and non-oil-exporting countries respectively; (c) mining, which showed very sluggish growth even in the major oil-exporting countries which tended to maintain high over-all growth rates mainly because of the steady and high improvement in their terms of trade; (d) services, which grew faster than GDP in all the subgroupings and for developing Africa as a whole.

92. As regards consumption and investment during 1970-1977 there was a consistent rise in the growth of these variables as per capita GDP increased. It is apparent that the better off a country is, the faster it increases both its consumption and its investment. Nevertheless, consumption as percentage of GDP was higher the poorer the country, averaging as much as 89.4 per cent for the least developed countries and 84.2 per cent for the non-least developed countries. Conversely, investments were higher for the richer countries ranging from an average of 34 per cent for the major oil-exporting countries to an average of 12.9 per cent of GDP for the least developed African countries although the disparities in the over-all incremental capital output ratios are not very big. The foreign sector showed a low growth in the volume of exports and a relatively high growth of imports. For the major oil-exporting countries, the volume of exports grew by only 1 per cent while real imports grew at 17.8 per cent per year between 1970 and 1977. For developing Africa as a whole exports in real terms grew by an average annual rate of about 3.3 per cent as compared to an average annual rate of 9.5 per cent in real imports.

93. The estimated model's parametres shows that in the agricultural sector the elasticity of output to labour is, in each group, higher than that of acreage and the higher the per capita level, the higher the elasticity of labour as compared to the elasticity of acreage. For the least developed countries the elasticity of output with respect to labour was 0.88 while that of acreage was 0.36. For most of the other groups of non-least developed countries the elasticity of output to labour was higher than 2 and was as high as 4 for major oil-exporting countries. These figures emphasize the relative importance of labour in the expansion of agricultural output in all developing Africa and especially for these groups of countries with relatively

higher *per capita* GDP like the major oil-exporting countries. The importance of agricultural labour should also be taken as an indicator of the importance of controlling rural-urban migration.

94. The major findings in the other sectors were that (a) in manufacturing there were relatively high incremental capital output ratios; (b) by and large, the coefficient of construction to investment was low and did not vary considerably between groups, the implication being that between 0.2 and 0.3 of all additional investment goes into construction in non-agricultural fields; (c) energy had a relatively higher coefficient (as a function of manufacturing, mining and construction) in the poorer countries which have more need for power; (d) there was a structural similarity among groups in transport in terms of the slow pace of growth and the amount of incremental value added taken by the transport sector; and (e) the ratio of services is high in both the poorer and the richest groups perhaps because of the importance of the recorded informal sector in poorer countries and the proliferation of service employments in the richer ones.

95. The consumption function for all the groups was relatively stable with only small differences in the marginal propensities to consume possibly because the poor countries still have high consumption needs while the richer countries have stimulated consumption as a result of fast growth. The import functions show that import dependence has been increasing with GDP particularly in the non-least developed countries including the major oil-exporting countries which have a very high import rate. The import propensity in developing Africa seems to increase steadily with income.

96. These historical trends forecasts which are based on the assumption of a continuation of past trends and policies show that in general the economic growth rates forecast for different regions are increasing functions of their current economic status. Thus the least developed countries have the lowest forecast over-all growth and the major oil-exporting countries have the highest. The growth rate for developing Africa sa a whole on the historical trends scenario is forecast at around 5 per cent per annum implying a *per capita* growth of around 2 per cent. Agriculture is forecast to improve compared to the 1970s and achieve a growth rate of about 2.5 per cent during 1980-1990. This improvement would however be less than population growth which would lead to dependence on imports to feed the increasing population. In mining the forecast gave a relatively low level of expansion in real terms although for the major oil-exporting countries the terms of trade may possibly lessen the impact of this trend. Increasing growth rates of manufacturing, energy and construction were forecast for developing Africa as a whole and for the various groups. Transport growth was relatively low and, for Africa to avoid facing an imbalance between transport and the other sectors, action has to be taken to improve the growth of transport.

97. Again according to the historical trends scenario, consumption, owing to a very high marginal propensity, is forecast to grow relatively fast often with an elasticity of greater than unity, thus umplying a decline in savings as a percentage of GDP. Investments in general are forecast to increase at a higher rate than GDP which, given the declining savings, would mean that

growth would have to be buttressed up by greater dependence on imports financed from foreign sources. Export growth is forecast to average around 4 per cent on basis of historical trends for developing Africa as a whole while the corresponding growth of imports would be above 8 per cent. Thus on the basis of past trends and policies, there is a continued external resource constraint.

98. In the planned scenario, a target growth of GDP for the various sub-groups shows that most groups can achieve at least 6 per cent growth in the 1980s. The over-all growth for developing Africa is projected at around 7 per cent per year. This grouwth is projected along and consistent with the target growth of 4 per cent in agriculture and 9.5 per cent in manufacturing for developing Africa as a whole. The other sectors, namely mining, construction, energy, transport and other services, are projected to require an expansion of 5.9 per cent, 9 per cent, 7.9 per cent, 6.5 per cent and 7.7 per cent yearly respectively for the period 1980-1990.

99. On the expenditure pattern of GDP, the planned scenario points to a target of maintaining consumption at not more than 81 per cent of GDP, implying at least a saving rate of 19 per cent for developing Africa as a whole. Investments are projected to reach 30.8 per cent of GDP by 1990 and, to attain an over-all GDP expansion of 7 per cent yearly, the incremental capital output ratio for developing Africa as a whole would have to be improved and maintained at an average of 4.4. The least developed countries, whose investments as a percentage of GDP are projected to remain at a relatively low level of 14.4 per cent, would require extra efforts to maintain a low incremental capital output ratio of about 2.4. Exports are projected to grow by an average of 7.5 during 1980-1990, calling for major efforts by all groups including the least developed countries (7 per cent growth in real exports) and the major oil-exporting countries (10.5 real export growth). Imports on the other hand are projected to grow by not more than an average of 8.2 per cent for developing Africa as a whole in 1980-1990 and this would require a reduction in the import elasticity to not more than 1.2. Over-all the trade gap is forecast to be dominant which would call for the necessary adjustors like export promotion and import substitution.

100. The policies that emerge are all in line with the Strategy for Africa for the Third Development Decade as adopted in resolution 332 (XIV) of Conference of Ministers. In agriculture the major implications of the results can be summarized as follows:

(a) agricultural output should expand by about 4 per cent;

(b) in view of the high elasticity of agricultural output to labour, agricultural labour intensity should be increased with (i) greater investment in the rural sector; (ii) improved rural infrastructural development in feeder roads, electricity and pure drinking water; (iii) land reform policies; and (iv) adequate pricing policies aimed at increasing rural income and improving the rural-urban terms of trade;

(c) cultivable land area should be increased through, <u>inter alia</u>, multinational co-operation irrigation projects like river basin schemes and small and labour-intensive irrigation projects;

(d) over-all agricultural productivity should be improved by, <u>inter alia</u>, strengthening the link between agricultural research and the rural production process.

101. In the manufacturing and infrastructual sectors the major implications of the results are:

(a) developing Africa as a whole should aim at much higher rates of expansion in manufacturing and infrastructure than achieved during 1970-1977 with a target rate of 9.5 per cent yearly growth in manufacturing, and this would call for policies to: (i) increase substantially the efficiency of capital through the elimination of undercapacity utilization, improvement in management; improved project formulation, appraisal and implementation and increased use of appropriate labour-intensive technologies; (ii) develop patterns of industrial development with strong interindustry and intersectoral linkages which utilize local resources to the greatest extent possible; (iii) increase intra-African trade substantially including in particular trade in manufactures; (iv) evolve multinational industrial projects to derive maximum advantage from economies of scale; (v) enable developing countries have adequate access to international markets thus necessitating the removal of trade barriers by developed countries; (vi) enable developing countries have easier access to technologies and to enhance the capacity for these developing countries to co-operate in this field; (vii) increase the flow of external resources to permit the importation of capital goods;

(b) particular attention will need to be given to the energy sector, especially in the poorer countries of the region, to explore and utilize alternative energy sources and to establish multinational co-operation projects in energy like hydroelectric schemes;

(c) transport must expand by over 6 per cent yearly in the 1980s including road, rail and maritime transport, with special attention being paid to the land-locked countries and to the co-ordinated transport network for Africa as a whole.

102. The results also show that in the 1980s, developing Africa will have to maintain high rates of domestic savings to finance the high rates of investment. Similarly, the trade sector shows trends of increasing import dependence which will have to be reduced in the 1980s. The relevant policy implications are that:

(a) the trend of high propensities to consume should be controlled especially in the richer countries;

(b) the poorer countries still with high consumption needs should make every effort to reduce their incremental capital output ratios so as to achieve higher expansion with relatively low rates of investments;

(c) in view of the likely dominance of the trade gap in the 1980s, developing African countries should aim at adequate import substitution policies in consumer and basic capital goods;

(d) over-all import elasticities should be reduced drastically to not more than 1.2 during 1980-1990 for developing African as a whole, an objective which will require: (i) changing the present import patterns so as to reduce imports of luxury and consumer goods; (ii) establishment of more domestic, efficient and wide-ranging import substitution industries; (iii) increased agricultural expansion and especially food production to reduce the food import bill; and (iv) development of national capabilities in project management, design, evaluation and implementation to stem the present trend of using imported "services";

(e) exports will also have to grow substantially in volume and value terms in the 1980s and in this respect there will be a need: (i) to upgrade substantially the local value added content of Africa's exports through increased processing of raw materials; (ii) to diversify trade patterns and reduce dependence on trade with one group of countries; (iii) to increase African co-operation and, in particular intra-African trade to more than double its present level especially in manufacture; (iv) to increase and strengthen the bargaining capacity of African countries through co-operative measures among producers; (v) to secure improved terms of trade in favour of the developing countries; and (vi) to secure increased access by the developing countries to international markets.

103. In terms of social goals, it should be noted that the results of the projections have consistently pointed to the need for fundamental changes in agricultural, industrial, technological, savings and trade policies. To achieve these changes it is necessary to establish a broad-based growth process in the African socio-economic structures with mass participation. Thus all policies have to take fully into consideration the problems of mass poverty, unemployment, satisfaction of basic needs and income distribution.

104. Owing to the extremely low level of per capita income in the African least developed countries, there is widespread of mass poverty which does not emanate from larger inequalities in income distribution since the Gini coefficients show that in these countries income disparities are less pronounced than in non-least developed African countries. However, mass poverty in absolute terms in the least developed countries, is great and there is great need for accelerated development in these counties. Further estimates show that the satisfaction of basic needs along with the concomitant objective of full employment requires a minimum growth of real GDP of 7 per cent in the future and this can be achieved only through the implementation of a new domestic economic and social order togather with a New International Economic Order. Basic needs programmes must also be built on self-reliance and self-sustainment if they are not to degenerate into mere global charity programmes at the international level.

105. The domestic policy implications of the projections for the least developed African countries are outlined in document ECA/CONF/LDCs/3. However, for these countries, the following policies will be vitally important in the 1980s and beyond:

(a) attainment of self-sufficiency in food; and

(b) a fundamental restructuring of production through (i) fuller exploitation of natural resources; (ii) establishment of optimal production units; (iii) fuller utilization of human resources; (iv) establishment of the necessary infrastructure especially in the land-locked and island countries; and (v) strengthening of subregional and regional co-operation.

106. In the non-least developed and non-oil-exporting countries the important policies relate to:

(a) expansion of agricultural output and especially food production with (i) agricultural projects that give quick returns and (ii) increased productivity especially per unit of labour;

(b) stronger growth in the mining and manufacturing sectors with more detailed studies of the mineral resources;

(c) increased import substitution of consumer goods with, whenever possible, some specialization among countries to enable the industries to be viable and profitable;

(d) increased control of imports of conspicuous consumption goods;

(e) preparation of more studies that analyse the intersectoral linkages.

107. For the major oil-exporting countries, the major implications of the projection results are that:

(a) efforts have to be made to increase the volume of exports;

(b) these countries should carry out detailed studies of their prospects and possibilities in fields other than oil and especially in agriculture and manufacturing;

(c) countries should direct their economies and control the level and pattern of affluent consumption, and carefully select investments with special reference to their cost.

III. QUANTITATIVE ANALYSIS OF THE PROBLEMS AND PERSPECTIVES OF THE AFRICAN LEAST DEVELOPED COUNTRIES IN THE FRAMEWORK OF THE THIRD UNITED NATIONS DEVELOPMENT DECADE ***

108. The following study was undertaken in pursuance of General Assembly resolution 3508 (XXX) of 15 December 1975 which called for the examination of long-term trends in the economic development of the world, Economic and Social Council resolution 2090 (LXIII) of 25 July 1977 and resolution 4 (II) of the Intergovernmental Group on the Least Developed Countries as further elaborated in the Arusha Programme for Collective Self-reliance and Framework for Negotiations. The study provides a series of projections of the major macro-economic variables covering the 1980s for the least developed countries.

*** Summary and conclusions of document E/CN.14/748.

109. The approach adopted is to build a macro-model out of a system of variables, which are considered as determining each other by mutual interactions while others are treated as exogeneous to the system and are used either as policy objectives or as externally determined. The simultaneous system or model is generally based on accepted technological or behavioural relations and parametres, which are estimated by statistical analysis of past behaviour.

110. To an extent this science is still in its infancy since many variables that influence economic movements like the political, social, institutional and ecological factors are not easily amenable to quantification and/or normally elude long-range projections. For this reason, econometric techniques must go hand in hand with a pragmatic approach based on a thorough study of the behaviour of the economy in earlier years; both approaches depend of course on the structural characteristics of the economy in the past and on judgment and common sense to future developments and policies and thus cannot be isolated from each other. In fact, econometric techniques help to avoid inconsistences in respect of economic policies and policy objectives and also indicate where policies can be most effective. It is for this reason that the ECA secretariat, through repeated visits to individual member countries, endeavoured to maintain a dialogue on the projection models, the data and parameter used, and the obtained results of the projections.

111. The period used for this derivation of structural parameters is in most cases the years from 1965 to 1977. In all cases, the main sources of data included the ECA national accounts data, FAO agricultural commodity production and the respective national statistical and other publications. It should be noted that in most cases there were enormous difficulties arising out of the general paucity, unreliability and lack of dissaggregated data and it is clear that there is an urgent need to improve the statisitcal capability of most of the African least developed countries. Technical and financial assistance is needed to enable these countries to efficiently use the traditional instruments of data collection, namely censuses, sample surveys and administrative records. It is thought that it would be useful if the ECA secretariat kept in close touch with the national governments to discuss the various results of projections and other studies including the data on which these are based. In this way, means can be continuously sought to build up the statistical infrastructures and to improve the data base in directions in which it is most likely to be relevant and useful.

112. The least developed countries in this study are those enumerated by the Committee for Development Planning of the United Nations on the basis of the following criteria, namely: (a) per capita GDP of $US 125 or less in 1970-1972; (b) the share of manufacturing of less than 10 per cent of GDP; or (c) the literacy rate below 20 per cent of the population. In this study the 20 African least developed countries were subdivided, for projection purposes into four groups on the basis of their per capita GDP in 1977 at 1970 constant prices. The subdivisions were as follows:

Group I - Botswana, the Sudan, the Gambia, Lesotho;

Group II - the Niger, the Central African Republic, the United Republic of Tanzania, Somalia, Malawi, Uganda;

Group III - Benin, Guinea, the Comoros, Cape Verde, and Chad;

Group IV - Ethiopia, Burundi, Rwanda, Mali, and the Upper Volta.

It should be noted that the classification was made of widely different territories simply on the basis of their *per capita* GDP and it should not be inferred that the groups are territorially, or in any other way, homogenous. The classification was made primarily on the basis of a *per capita* income above $US 110 for group I, a *per capita* income between $US 100 and $US 109 for group II, a *per capita* income of $US 75 to $US 99 for group III, and a *per capita* income below $US 75 for group IV. It is indeed necessary to exercise caution in using *per capita* income as the major criterion for classification.

113. Some of the common features found in the analysis of the African least developed group of countries is the heavy dependence on agricultural land in the economy. Out of the 20 countries, 17 countries have over 80 per cent of their population dependent on agriculture, and another three countries have 70 per cent depending on the agricultural sector, and in most cases there is a very high correlation between the arable land available *per capita* and the income *per capita*. Secondly, despite the high dependence on agriculture there was generally very poor performance in agriculture mostly declining in growth rate. Industry in most countries was growing at a higher rate than GDP showing that there has been some structural shift of GDP from agriculture to industry. The service sectors have been growing relatively fast possibly due to the growth of tertiary infrastructures. The rate of investment has been going up in most countries. Consumption has been growing but not much faster than population implying an almost insignificant rise in the real standard of living.

114. A review of the nature of performance of the groups as distinct from the individual countries within a group and a comparison with the least developed countries as a whole was undertaken to indicate what kind of problems the groups have and whether there is a case for treating them differently for projection purposes. In terms of GDP growth between 1965-1970 and 1970-1977 it was found that while in 1965-1970 there was no association between the different performance of the groups, in 1970-1977 which was generally a bad period, poorer countries performed poorer. It seems that due to lack of diversification, the poorer economies have less resources and capacity to absorb shocks from any sudden shift either in natural conditionson in external economic impacts.

115. The sectoral growth rates reveal that the less disadvantaged countries among the least developed countries, had better industrial growth rate during the entire 1965-1977 period. These countries also achieved better performance in agriculture in 1970-1977 again pointing out their comparative strength in hard years. Investments also follow a similar pattern with almost zero growth in investments for the subgroup of the poorer LDCs. While investments grew at an average annual rate of 10.3 per cent in subgroup I, the average growth rates for subgroup III and subgroup IV were only 2.5 and 0.8 per cent yearly respectively.

116. The structure of GDP also indicates that generally speaking the percentage of GDP going to consumption is higher in subgroup III and IV. Thus while in 1965-1977 the average share of consumption in GDP for subgroup I was 86.7 per cent, it was 96.1 and 91.6 per cent for subgroups III and IV respectively. The production structure also shows that by and large, the countries with relatively higher per capita incomes have more diversified economies. In the period 1965-1977 the respecitve shares of agriculture, industry and services for subgroup I were 39.6, 25.2 and 35.2 per cent. For subgroup II, the corresponding shares were 47.0, 23.9 and 31.9 per cent while subgroup IV had 52.8 per cent of GDP in agriculture, only 18.9 per cent in industry and 28.3 per cent in services.

117 The model developed for the group of least developed countries tries to capture the production (supply), consumption and trading structures of the small economies generally characterized by:

(a) a large proportion of agricultural value added in GDP with only few agricultural commodities accounting for the major portion of the value added in agriculture;

(b) having most of the capital in fixed investments in power, construction, transport and manufacturing which are considered as an aggregated industry sector;

(c) a tertiary sector denoted by services which behaves as a residual dependent on the output in the primary and secondary sectors;

(d) import levels which are determined by the availability of external resources but which tend to increase with income.

118. Production is estimated as value added in three sectors, namely agriculture, industry and services. In agriculture, two alternative approaches were tried. The first alternative obtains total value added in agriculture through a log linear production function using acreage and labour as the independent variables. Increased acreage is assumed to involve capital investment and, therefore, the agricultural production function may be said to be of a simple Cobb-Douglas type. The second alternative involves the use of the quantities of agricultural commodities. From a number of the most significant and important commodities (which should constitute over 80 per cent of gross output in agriculture), the gross output of agriculture is derived using the appropriate 1970 producer prices. The final agricultural value added is then obtained from the gross output estimate by subtracting an estimate of the intermediate inputs in agriculture.

119. Value added in the industrial sector is obtained from the cumulated capital stock in the industrial sector (viz, manufacturing, power, transport, construction and mining) via the incremental capital/output ratio. In the countries where some specific activities (e.g. mining) are very important as a single sector, these are estimated separately. The value added in the service sector is obtained as a function of the sum of value added in agriculture and industry. From the sectoral value added, total output - GDP at factor cost - is obtained by summation.

120. On the demand side of the economy, the traditional consumption function is used. Total and private consumption are separately regressed on total income (as a proxy for the often used national disposable income). Government consumption is then obtained as a residual from total and private consumption. In most of the cases, investments are taken as a policy variable. However, in some cases distinction is made between autonomous and induced investments. In these cases the induced investments are obtained from the system as a function of the level of income while the autonomous investment - usually government development expenditure - is left as an exogeneous policy variable. The model distinguishes two types of exports, namely historical exports and implied exports. Historical exports are obtained from the export quantities of relevant export commodities of a particular country using the appropriate export prices. The export quantities of the commodities are obtained from a function which relates the quantities of a commodity that are exported and the quantities produced. The implied exports are taken as a balancing item in the national account identity. Finally, imports are obtained from a function which relates the volume of real imports to the level of real income and the previous year's value of real exports. In the absence of reliable data on the external resources, the previous year's value of real exports were taken as a proxy. From the model functions above, the trade gap and the domestic savings gap are calculated from the appropriate identities and the more dominant of the two obtained.

121. The details of the results of the statistical estimation of the various model parameters for each individual country, for the subgroups and for the whole group of the least developed African countries are discussed in the text of this paper. For the group as a whole, the agricultural function showed that there is a larger elasticity for labour than for acreage. The elasticity with respect to labour was estimated to be almost three times that of acreage. In other words, this shows that labour intensity is far more important than expansion of acreage for increased agricultural output. The total combined elasticity of both labour and acreage was 1.34037 which indicates that there is an increasing return to scale in agriculture. This feature of the agricultural function was also noticed in a regional analysis of agricultural output for all developing African countries. The subgroups of the African least developed countries classified by income groups did not, however, have a well-behaved agricultural production function owing to the widely differing climatic and soil conditions in countries which might belong in the same income group.

122. The estimation of the industrial output function showed results of relatively high incremental capital/output ratios. This, of course, can be explained by the fact that industry in the analysis included transport, construction, etc., and in the poorer countries there is usually a large amount of infrastructural expenditure before output is significantly increased. The group of African LDCs as a whole was estimated to have an incremental capital-output ratio of 7 while for the subgroups the ICOR ranged from 2 (for the first subgroup) to 9 (for the subgroup with the smallest _per capita_ income.

123. The consumption function results clearly confirmed the hypothesis that the poorer the countries, the less they can find resources for domestic savings and that income has to be raised for the poorest countries before

domestic resources can be diverted to investments. The first subgroup of LDCs was estimated to have a marginal propensity to consume of 0.75, the second group had a marginal propensity to consume of 0.87, while the third and last subgroups had marginal propensities to consume as high as 0.97 and 0.99 respectively. For the group of African least developed countries as a whole the marginal propensity to consume was estimated as 0.89.

124. The import function results showed that the poorer countries in the African least developed countries had a higher marginal propensity to import with respect to GDP which is understandable. There was, however, no specific association between the level of imports and the lagged exports. Perhaps the greater inflow of external resources which relieves some of these countries from the tightness of their foreign exchange position might explain that lagged exports cannot be taken as proxy in some cases.

125. Two sets of projections or scenarios were made for the individual countries, the subgroups of countries and for the least developed group of countries as a whole. In all cases the first scenario is based on the assumption of no change in the historical structural parameters and the economic policies pursued. This scenario which is a forecast is intended to indicate, by comparison, the main direction and areas for policy changes if an improvement in performance is to be achieved. The second planned scenario tries to simulate and derive the implications for a target growth rate in GDP of 6 per cent yearly during the 1980s. In those cases where it was believed that a country has had a drastic break from the past pattern of development only the planned scenario was attempted. It should be borne in mind that according to the Report of the Seventh Group of Experts on Programming Techniques chaired by Mr. J. Tinbergen, "the word 'projection' has been used in connexion with two different ways of estimating the future value of any variable, namely forecasts and plans. A pure forecast is sometimes defined as an estimate on the assumption that no changes in policies take place, while the purest form of a planned development is an explicit optimal development. Both uses are given various interpretations, however, which raises the possibility of a range of different types of projection. A forecast and a planned development are sometimes contrasted to highlight the need for a change in policies and such a comparison is often fruitful. When considering pure forecasts and planned developments, we should not overlook these points: that for longer periods the assumption of constant policy is rarely realistic, that development policies usually will be characterized by a multiplicity of aims rather than a single one and a synthesis of aims must be found if any separately is incompatible with others. The assumptions about technology and aims made in a projection must be clearly stated if confusion about the nature of the projection is to be avoided".

126. The parameters and alternative scenarios discussed are based on existing and explicitly known potentials in the countries and also on given patterns of resource utilization. They do not completely take into account the large possibilities that are not yet explored. These possibilities include, inter alia, the natural resources, the human infrastructure and potentials that could drastically change the performance in a short time.

127. On the basis of past trends, and in the absence of drastic domestic and international measures to assist the African least developed countries, the forecasts for 1980-1990 were that the least developed countries as a whole would grow slowly and might just keep pace with the current growth rate of production. For the group of the African least developed countries as a whole an average growth rate in GDP of 2.9 and 3 is forecast for the 1980-1985 and 1985-1990 periods respectively. The historical trends scenario also points to the trend that the different subgroups already different in per capita GDP are likely to grow at rates varying directly with their present level of GDP. In other words the past disparities in performance are likely to continue in the future. The first subgroup with relatively high per capita GDP is forecast to grow at an over-all average annual rate of 3.9 per cent in 1980-1985 and 4 per cent in 1985-1990. In comparison the fourth subgroup with the lowest per capita income is forecast to grow at an average over-all rate of 2.7 and 2.8 per cent yearly in the corresponding periods. In other words per capita income would remain almost stagnant.

128. In agriculture, the over-all performance of the group of the African least developed countries is forecast to grow by an average annual rate of 1.8 per cent in the period 1980-1990. The projected agricultural performance varies from one subgroup to another. It is apparent that performance in agriculture will depend on a variety of circumstances including weather. Industry is forecast to grow at 5.5 per cent yearly for subgroup I, at 5.4 per cent yearly for subgroup II, at 3.4 per cent yearly for subgroup III, and at 4.1 per cent yearly for subgroup IV during the 1980-1990 period.

129. On the demand side, consumption is projected to grow much faster than GDP which implies that on the basis of past patterns, policies and trends, the domestic savings of the least developed countries on the whole will decline as a percentage of GDP. This decline is forecast to be most serious in the poorest subgroup. Investments show higher growth rates in the subgroups with higher per capita GDP. Thus while on the basis of historical trends the first subgroup is forecast to have an increase of 8.5 per cent per annum in real terms in investments in 1980-1990, the fourth subgroup with the lowest per capita income is forecast to achieve a mere 0.9 per cent yearly growth in real investments. The share of investments in total GDP is forecast to be around 14 per cent in the 1980s for the group of the least developed countries as a whole. In spite of the forecast of lower investment, the forecasts indicate that if the historical trends continue, the poorer countries of the least developed countries will have an increasing savings gap. Exports are generally projected to lie within the range of 12 to 25 per cent of GDP in the 1980s while imports are forecast to range from 16 to 35 per cent of GDP. In general the exports as a percentage of GDP are projected to be far less for the poorer countries than for the more better off. For the least developed countries as a group, the trade gap is projected to reach about 7 per cent of GDP in 1990 as compared with 4.7 per cent in the base year 1975. In other words for the group of least developed African countries as a whole and under this dismal scenario, net external resources inflow at constant prices has to increase 2.3 times between 1975 and 1990, or by an average annual growth rate of over 6 per cent.

130. In summary, the over-all picture for the least developed African countries shows that the rate of growth of GDP at constant 1970 prices will average around 3 per cent yearly in the 1980s if the past trends and policies are assumed to continue. The slow growth is particularly pronounced in agricultural output which is forecast to grow less than 2 per cent during 1980-1990. Industry is forecast to grow relatively slowly at an average annual rate of 4.4 per cent yearly during 1980-1985 and by 4.5 per cent yearly during 1985-1990. Total investment is forecast to grow by 4.7 per cent annum between 1980-1985 and by about 5 per cent yearly during 1985-1990. The relative increase in investment is however, not forecast to be accompanied by a commensurate increase in total output owing to the rather inefficient utilization of capital. Total consumption is projected to increase only slightly in terms of its share in GDP from the 1970-1977 average of 88.4 per cent of GDP to around 89.5 per cent giving a low domestic saving rate of a mere 10.5 per cent of GDP. At this saving rate the saving gap would be around 3.6 per cent of GDP in 1985-1990. Assuming that the historical import elasticity for the group as a whole (estimated to be greater than unity) will not change drastically in the coming decade, imports are forecast to increase at average annual rates of 4.6 per cent during 1980-1985 and 4.9 per cent during 1985-1990. This will imply that if the historical trends in exports prevail there will be a gradual increase in the trade gap from around 5.6 per cent of GDP in 1980 to around 7.1 per cent of GDP in 1990 or over 6 per cent yearly in real terms. Under these forecasts, it is apparent that the resulting trade gap is dominant for the group of LDCs as a whole. This points to the need for adjustments that are applicable when the trade gap is dominant. These adjustments include additional import replacement, export promotion or the conversion of savings into consumption. Regional co-operation among developing countries would also be of importance in the pursuit of such policies.

131. The implications of the forecsst on the basis of the continuation of past trends and policies are clearly disastrous. Per capita income would remain almost the same with mounting mass poverty, unemployment and social upheavals. There is therefore an urgent case for making some structural changes. In a scenario of a target growth of GDP of 6 per cent yearly in the 1980s, it was projected that agriculture and industry will have to grow much faster than in the past for the group of LDCs as a whole. Agriculture will have to attain a growth rate of 4 per cent yearly while the industrial sector will have to grow at an average annual rate of about 8 per cent. To attain these growth rates require, inter alia, improved capital efficiency, increased labour and land intensity and productivity, a growth rate in real investment of around 7 per cent and increased domestic savings. A target growth rate in GDP of 6 per cent yearly, and with the domestic savings rate remining at the historical level, will result in a savings gap projected to increase at an average annual rate of 8 per cent yearly and approaching 4 per cent of GDP by 1990. The trade gap will only be brought to controllable levels if a specific, and perhaps optimistic assumption of an average annual growth rate of 7 per cent in real exports is fulfilled. Under this assumption, the trade gap would stabilize at around 5.7 per cent of GDP in the decade.

This does not mean that under the planned scenario the volume of net inflow of foreign resources required would be less than under the historical forecast. In actual fact net resources inflow at constant prices for the planned scenario of 6 per cent growth rate in GDP for the African least developed ountries would have to be increased almost three times between 1975 and 1990, or at an average annual rate of expansion of 7.4 per cent. In the 1980s the average annual rate of growth in net resource inflow would have to be about 6.6 per cent or nearly double in the decade. This emphasizes that an initial big push in net resources inflow in the early 1980s is essential for an immediate crash programme. In addition it should be borne in mind that those estimates of the trade gap and the derived net foreign resources requirement do not include debt servicing and other factor income to abroad which could actually augment the balance-of-payments gap. Also, it should be emphasized that if the high export growth rate of 7 per cent does not materialize, the trade gap will be higher than the above estimates.

132. The two scenarios give some indications of the implications for the eradication of mass poverty, basic needs satisfaction and the necessity for regional co-operation. The historical scenario implies a nearly stagnating <u>per capita</u> income and hence no mitigation of mass poverty. The second planned scenario of a target 6 per cent growth in GDP implies an average annual increase of about 3.6 per cent yearly in real <u>per capita</u> income (taking a 2.4 per cent average growth in the total population of the African least developed countries). Obviously, even this accelerated increase in real <u>per capita</u> would not seem to be sufficient to satisfy basic needs and at the same time raise domestic resources required for a self-sustained growth and self-sufficiency at the national level.

133. The parameters and the implications of the alternative scenarios clearly show that the African least developed countries have had, and may well continue to have, a very poor economic performance unless special measures, policies and development strategies are formulated and implemented. The policies that emerge as critically important relate both to the short run and the long run. Of paramount importance in the short run is the necessity for the African least developed countries to achieve self-sufficiency in food. This calls for urgent action to increase over-all agricultural output to grow by about 4 per cent yearly over the coming decade which in turn, necessitates (a) increasing the productivity of both land and labour, (b) substantially increasing the arable land area through irrigation and land reforms, (c) increasing investment in agriculture with a better and more rational balance between investments for export-crop production and investments for food-crop production, (d) extensive planning of integrated rural development programmes, (e) increasing extension services and agricultural research, (f) improving the rural/urban terms of trade, and (g) making better organization and training and the fuller utilization of manpower.

134. In the Arusha programme endorsed by UNCTAD V, the least developed countries themselves specified the kind of emergency assistance they needed on the basis of a crash programme. These countries emphasized the need for expanded assistance for projects already identified or in the pipe-line, in the fields of nutrition and health, education, transport and communication, housing and the creation of employment. In the field of agriculture they

emphasized the need for massive support for fertilizers and assistance to improve management, maintenance and repair and to improve the efficiency of existing infrastructure. It was also pointed out that financial and commodity support on an extension basis was necessary for local small-scale employment generation. These due needs, and the many others, of the least developed countries deserve strong recommendation and support.

135. From the earlier observations it seems that the poorer countries of the group of least developed countries are more likely to suffer from a savings gap while the less disadvantaged countries are more likely to feel the constrainints of a trade gap. Hence appropriate approaches to development assistance might seem desirable. Investment in the poorer countries is miserably low and their consumption propensities, both average and marginal, are high. For these countries it is desirable that international aid for capital development should be added to that already given for the purpose of meeting essential consumption needs. These countries require aid in sufficient quantities to enable them to move over from the level of almost zero growth rates to moderate rate of growth in investment. For those countries where savings are being generated at some level, international efforts should assist these countries' earnings through exports by giving them better prices for their products, by the creation of such funds in order to stabilize the prices of their exports and by offering them better terms on a preferential basis.

136. The countries themselves will need to undertake considerable and drastic changes in their consumption levels. Specifically, there will be a need to lower both the marginal and average propensities to consume to around 85 per cent. Concomitantly, imports and particularly the marginal import rates for consumer goods have to be lowered substantially. These efforts on consumption and imports of consumer goods must also be accompanied by an increase in the efficiency of capital so as to ensure growth and to improve the real standard of living. Some of the factors causing the high incremental capital/output ratios in the economies of these countries have to be improved. These include the minimization of undercapacity utilization through, <u>inter alia</u>, integrated regional approaches to industrial development and improved management of the productive enterprises, reduction of long gestation periods for projects making more suitable projects that lead to quick production of physical commodities. Also, realizing that in many instances, the poor utilization of manpower potential is at the core of efforts to alleviate poverty in particular and to improve economic performance in general, these countries' policies should emphasize the fuller utilization and better training of their manpower resources.

137. The long-term policies for the group of African least developed countries mainly concern the task of achieving a fundamental restructuring of the patterns and lifestyles of development. The UNCTAD resolution no. 122 (V) noted in this respect that the most important feature was the need for transformational investment to lead to (a) fuller exploitation of the natural resources, (b) development of an industrial base, (c) establishment of optimal production units like small-scale industries linked to the relevant sectors especially agriculture and the informal sector.

138. The present paper is just an attempt to throw some light on some aspects of the problems of the African least developed countries. Its limitations lie, inter alia, both in the methods used and in the fact that it deals mainly with macro-variables. It is clear that using more elaborated techniques both quantitative and qualitative and more detailed data would give more precise and more concrete recommendations at national and regional levels. However, the study presented here points to the fact that unless drastic structural changes are undertaken, the African least developed countries are likely to face more serious problems in the 1980s than those faced in the 1970s. It also suggests that there is room for the achievement of these structural changes especially in making more efficient use of the enormous natural and human resources of the continent. This, obviously, cannot be achieved without domestic policies for increased self-reliance and self-sustainment and the strengthening of regional co-operation as was emphasized in resolution 332 (XIV) entitled "Development strategy for Africa for the Third Development Decade" adopted at the fourteenth session of the Commission, by the fifth meeting of the Conference of Ministers, held in Rabat in March 1979.

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