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DEVELOPMENT GOALS FOR THE UGANDA ECONOMY IN 1981

A. Likely goals.

1. Uganda not only suffers from low per capita income at present but, for a number of years, has suffered from a rate of growth insufficient to raise per capita income. During the period 1957-1962 little growth has been achieved, largely because of the poor export performance of the economy, faced as it was with falling commodity prices. The government of Uganda wishes to transform this picture, to mobilize the economy to double per capita output during the period covered by the next three five-year plans (1966-1981). This paper examines the conditions necessary for achievement of that objective.

2. This objective implies a rate of growth of gross domestic product on the monetary sector of about 8.4% per year. Such a rate of growth is near the upper end of the range of growth achievements of other countries throughout the world in the last twenty years. It is essentially the same as that projected in the new Tanganyika plan. Above all, such an objective is ambitious, in comparison with past experience. If Uganda is to be developed, however, past experience must not be repeated. Even the overall goal as stated will leave Uganda with less than £50 gross product per capita in 1981. In terms of the needs and aspirations of the Uganda people it would hardly be possible to set the goal lower.

3. Such a goal cannot be achieved by a simple reproduction of past development patterns. It will require substantial transformation of the economy. It will require achievement of output levels higher than have been previously thought possible, a changing industrial structure, new patterns of employment, changes in the composition of imports and exports, substantially increased tax rates, and very high rates of saving. The organization of such a transformation in detail will be the task of the five-year plans. In devising each five-year plan, however, it is very helpful to have a longer view of where the economy is going. Unless such a view is asserted at the outset, horizons are likely to be set by past experience and goals limited by immediate possibilities. In this paper, therefore, we attempt to draw a picture of the possible economy of the future and of the path to be taken to reach that situation.

4. In addition to the overall objective of high growth there are other goals the government may wish to set. Some other goals might be:

- (a) expansion of employment opportunities at a faster rate than the growth of population, so that the employed labour force can become an increasing proportion of the population;
- (b) expansion of education so that by 1981 the supply of Ugandans will be sufficient to fill substantially all high-level professional and managerial posts;
- (c) expansion of community and health services, so that by 1981 certain minimum facilities will be available to the mass of the people;
- (d) a relative shift from dependence on agricultural exports to sales in the domestic market for the majority of the rural population;
- (e) provision of adequate conditions for African urban living, so that by 1981 the main towns are as much as three times as large as today, with some minimum standard of housing and services.

B. The magnitude of the effort

5. To begin the process of economic transformation, a development effort will be required greater than any forthcoming in previous Uganda experience. It is important to stress that such an effort will be required, but also that there is good reason to suppose that it can be achieved.

6. In order to grow an economy must expand its means of production. In particular, the skills of the labour force must be improved and the stock of capital available must be increased. To increase the stock of capital, part of current output must be set aside to produce, import, and install additional machines and buildings. Moreover, if the annual rate of growth is to be increased, the proportion of output devoted to capital accumulation (i.e. the share of investment) must be increased. Correspondingly the proportion available for current consumption (though as we shall see not necessarily the absolute amount) must be decreased.

7. By how much will the share of investment have to be increased in order to achieve the desired rate of growth? This depends on:

(i) the net investment needed to provide additional capital for increasing output;

(ii) the investment needed to replace capital being retired.

For example, if £3 additional capital is needed to create £1 additional output, then the share of investment to meet the first requirement above would be 3% of total output for each 1% in the annual rate of growth. In addition, a further amount of investment would be needed for replacement, independently of the annual rate of growth.

8. The required relationship between additional capital and additional output, the net capital-output ratio, may be roughly predicted on the basis of past experience. Such predictions must be refined in working out the detailed five-year plan, but will provide a guide to the order of magnitude of the effort involved. Examination of the evidence suggests that during the period 1954-60 the capital-output ratio in the Uganda economy was between 3 and  $3\frac{1}{2}$  for the monetary sector (using the recent deflated estimates of gross domestic product). This suggests that during that period Uganda had a slightly higher capital-output ratio than that for East Africa as a whole.\* It is our judgment that for the purpose of setting the long-range perspective it would be sensible to assume a net capital-output ratio of 3. Although this is a little lower than that experienced during the 1954-1960 period, the general sluggishness of the economy during the latter part of that period probably boosted the observed capital-output ratio, with the creation of some over-capacity. The capital-output ratio we assume might well be improved upon with a fast-expanding full-capacity economy.

9. It is also true that in a fast-growing economy replacement investment can be provided with a lower share of current output than in a less expansionary situation. We believe that a reasonable long-range assumption is that 7% gross product must be used to replace capital retired in an economy growing at the rate taken here as an objective.\*\*

10. Using these two estimates, the gross investment effort needed to raise output at the desired rate may be calculated. The sustained growth rate of 8.4% in monetary gross domestic product will

\* See B. Van Arkadie and P. Ndegwa, "Future Trade, Balance of Payments, and Aid Requirements of East Africa", EDRP 31, 27.5.64; also Kenya Government, The Growth of the Economy, 1954-62.

\*\* See B. Van Arkadie and P. Ndegwa, op.cit. Note that the relevant concept here is replacement of retired capital, not investing an amount equal to depreciation. In a growing economy retirement lags behind depreciation.

require that 32% of that product be allocated to gross capital formation, leaving 68% for other uses. This represents more than twice the current share of investment in gross product. Even if very substantial improvements in the use of capital were achieved and the capital-output ratio were reduced to 2.6 (which would be a very considerable performance if sustained over a long period), then the necessary capital formation would still be 29% of monetary gross product, still nearly twice the current effort.

11. Recent years may not provide the most relevant indication of whether this ambitious development effort is attainable however. Uganda has achieved much higher rates of capital formation in the past. In 1955, for example, capital formation apparently formed about 28% of monetary gross domestic product (at 1960 prices). Table 1 shows capital formation as a percentage of gross domestic product for East Africa as a whole during the period for which data is available. The levels achieved during the mid-fifties were near the effort envisaged for the future. In 1956, for example, Kenya managed to allocate 31% of its monetary gross product to capital formation. Seen in these terms, the goal is not excessive.

12. It is important to realize that although the achievement of a higher share of investment will reduce the share of resources available for consumption and other current uses, the achievement of the higher growth rate will presently provide a higher level of output from which higher consumption standards can be achieved even though the high share of investment is maintained. This is illustrated in diagram 1, in which levels of consumption and other current uses are shown over the remaining years of the current plan and the next three five-year plans under two alternative policies:

- (a) that the share of investment and the growth rate remain at their present low level;
- (b) that the share of investment is doubled by the end of the next five-year plan and a much higher growth rate is achieved.

During the period up to 1971, the "changing of gear" phase, the development effort requires moderate restraint on consumption; consumption increases absolutely, but is below what could be enjoyed if the development effort were not increased. By 1971, however, the entire shortfall in consumption and other current uses can be made up, and thereafter the gains mount rapidly.

13. The conclusion to be drawn from this discussion is that it is essential that the public be persuaded to accept restraint on the increase of consumption in the early years of the "big push". To do this they must be persuaded that they will eventually reap the benefits in higher levels of living. This job of education and persuasion will form an important element in the success of the next three five-year plans. One important contribution of the long-range perspective to 1981 is to show the ultimate returns from the efforts needed in the near future. The task of persuading the public to accept restraint is of course more likely to be successful if part of the investment programme is clearly seen to be creating facilities near to the desires and aspirations of the public, such as schools and hospitals.

14. How is this increase in capital formation to be brought about? It has been characteristic of the Uganda economy that a high proportion of capital formation has been carried out in the public sector; for this purpose the U.D.C. and the U.E.B. are counted along with the Central Government as part of the public sector. This is illustrated in Table 2, which shows that 60-70% of investment has been in the public sector. In the future, it seems likely that the share of investment in the public sector will need to be if anything higher than in the past, as the Government takes the lead in raising total capital formation. In the public sector

simply plays the same relative role as in the past, the high-growth objective implies that the public sector must utilize about 20% of total product for capital formation, while the private sector would be responsible for utilizing 12%. Investment by the Central Government itself would have to increase from £5 million in 1962 to £23 by 1971 and £54 by 1981.

15. The importance of the public sector has both advantages and disadvantages. The major disadvantage is the tremendous responsibility it places on the shoulders of the public authorities to organize large investment projects, to raise tax revenues rapidly and increase the budgetary contribution to development investment, and to tap energetically both foreign and domestic sources of lending for development. The advantage is that the public sector is more susceptible to planning control than the private sector. In particular, the tremendous levels of public investment implied by this programme will require public authorities to extend their activities in new areas, and will place a strategic responsibility on the shoulders of the Development Corporation and any similar organizations created in the future.

16. This leading role for public investment still implies a dramatic expansion of private investment compared to the recent past - from about £5 million in 1962 to as much as £22 in 1971 and £52 in 1981. Indeed in drafting future five-year plans it may be tempting to cast the private sector into a bigger role, hoping that it will undertake a larger share of investment activity than has been achieved in the past. This might be justifiable if practicable policies can be devised which could realistically be expected to call forth such efforts from the private sector. On balance, however, we feel that it would be over-optimistic to expect private domestic and foreign investment to be the main engine of expansion. It should be noted, for example, that Uganda will be competing for foreign investment funds with many other countries who themselves will be mounting ambitious development programmes. The specific role of the private sector can only be hammered out in the preparation of the five-year plan, but our general presumption is that if private investment can be expanded at the same rate as public investment it will be a considerable achievement.

#### C. High growth and structural change

17. In this section the effect of the high growth goals on the structure of the economy are analysed. The method used is to apply the growth and capital formation objectives to a statistical projection model of the Uganda economy.\*

18. Table 3 presents a synopsis of the key features of a programme to double per capita output as we see them. There are four major elements of development strategy which we wish to emphasize.

(1) The effect of the high investment effort on the economic structure

19. High levels of investment not only expand future capacity to produce, but also have an effect on the composition of current output. As investment expands as a proportion of total product, so do those industries which manufacture investment goods. The effect of the high investment in the case of Uganda will depend on the degree to which the investment takes the form of construction and building or machinery and equipment.

20. Many of the basic inputs of the construction and building industry are already produced in Uganda. For example, cement, some

\* See P.G. Clark, "Rationale and Use of a Projection Model for Uganda", EDRP 39, 10.7.64.

products  
structural steel, bricks, and asbestos/are all manufactured locally. It is likely that in the future the range of building materials produced locally can be expanded. Therefore expansion of construction and building will provide considerable impetus to the expansion of other local production. Also, construction itself employs large amounts of local labour and, to an increasing extent, results in profits for local contracting firms. By contrast, most machinery and equipment is imported and is unlikely to be produced locally during the perspective being considered here. Expansion of investment in machinery and equipment will therefore have an impact mainly on the import bill. Against this, it is true that machinery and equipment tend to be more productive in creating additional capacity than is construction.

21. All things considered, however, it is our judgment that the balance in the future is unlikely to be far different from the past, i.e., about three-fifths construction and building and two-fifths machinery and equipment. If anything the share of construction may tend to rise, because of the prominent role projected for Central Government investment, which is almost entirely construction. A pronounced reduction in the share of construction, on the other hand, would probably require explicit government restraint on private investment in housing. If this judgment is correct, then the construction industry will have to expand more dramatically than any other sector of the economy, as noted in section D below. At the same time, a very sharp rise in equipment imports will be needed.

22. The future growth of the construction industry also relates closely to two of the other development goals mentioned in section A above. If one object of the plan is to develop the urban environment to provide for an increasing proportion of urban dwellers in the total population, rapid growth in construction is clearly implied. An alternative quite reasonable view might assert that such development should have a low priority, and that the primary aim should be expansion of actual manufacturing facilities leaving the urban dweller in the meantime to find what accommodation he can. This issue of goals will of course have to be settled by policy-makers.

23. The second point involves employment objectives, as discussed further in Section F below. From the point of view of creation of employment opportunities, the construction industry has the desirable property that it is a heavy user of labour and that its rapid expansion would provide a great increase in the number of available jobs. At the moment, for example, every £1 million of construction spending provides employment for about 3,000 workers, which is about twice the ratio for other non-agricultural sectors. Moreover, construction is not one of those industries in which labour saving shifts in technique are likely to be considerable.

(ii) Import substitution and the growth of manufacturing

24. The second striking feature of a high-growth economy is the growth of manufacturing to supply goods currently imported. This is a major element of development strategy for two reasons. First, in order to achieve the marked expansion in imports of equipment required, it will be necessary to cut down other items in the import bill, so as to restrain imports within conceivable foreign borrowing. Second, a more rapid advance in industrialization requires that Uganda start manufacturing some of those goods currently imported, as well as increase its output of existing manufactures.\*

25. The expanding market for increases in output for the manufacturing sector can be divided into four categories:

(a) growth in domestic demands already supplied by existing industries;

\* See B. Van Arkadie, "Import Substitution and Export Promotion as Aids to Industrialization in East Africa," EDRP. 24, 6.3.64, for a discussion of some of the issues involved

- (b) import substitution of consumer goods (mainly non-durables) and of intermediate goods other than fuels;
- (c) import substitution of construction materials;
- (d) growth in manufactured exports (mainly to the rest of East Africa).

26. The import substitution indicated in Table 3 is very considerable - 50% in the case of category (b) and 75% in the case of category (c). Fulfilling this condition will involve the production of many goods which have not been previously produced in Uganda, as well as dramatic growth of industries already started. Examination of Uganda's current import bill suggests that the most important single area of manufacturing expansion in terms of value must be textiles and clothing. In 1961 imports of textiles products and clothing into Uganda amounted to over £7 million. Insofar as textiles and clothing are still imported by 1981 those imports should come from other parts of East Africa, on the basis of some degree of local specialization, Uganda's inter-territorial imports of textiles and clothing having their counterpart in inter-territorial exports. A substantial beginning has already been made in this area, but the next years must see even more substantial growth into product lines not currently attempted. Food products and buildings materials will follow the textile and clothing industry in terms of increases in value of output. There must also be numerous small scale light industries, each individually of little importance, but taken together making a significant contribution to the industrialization of Uganda.

(iii) The role of the government and the budget

27. In addition to the important role for government in expanding overall investment, it must be expected that government current expenditures will increase at a faster rate than in recent years. The suggestion here is that government current expenditures will grow at a slightly lower rate than monetary domestic product, but that this will still be double the rate of expansion in the 1958-62 period.

28. Many of the services provided by government are essential aids to economic growth. The provision of greater educational facilities, for example, will be necessary to provide the improvement in the labour force necessary to sustain the growth rates suggested. Expanding government services also contributes to spreading the benefits of growth among a far wider group than the direct beneficiaries of development projects, and therefore provides an incentive among the population at large to support the plan.

29. The government is therefore faced with a necessity to raise finance both to cover the costs of increasing current services and to provide a substantial budgetary contribution to development investment. This will be the most unpopular feature of the plan and will demand widespread understanding of the ultimate objectives of the plan to gain public support. Our calculations indicate that during the next five-year plan (1966-71) effective tax rates will have to increase by about 30%. How this increase is allocated among different tax sources is partly a matter of political choice, but a reasonable pattern may be as follows: Part of this increase in rates will take the form of increases in customs duties, which will have as its objective protection of new industries as well as revenue increases from continuing imports; the changed composition of imports will probably require that duties be extended to goods now lightly taxed, if adequate revenue is to be found. In addition local industries will have to carry an increasing burden of indirect tax to compensate for the loss of revenue as import substitution proceeds. Direct taxes will also have to be increased, though this adjustment will be eased because the types of income subject to direct tax will probably be rising faster than total incomes. Finally, export taxes will have to be raised to offset the effect of declines in export prices.

30. The underlying objective is to keep planned Central Government borrowing, both foreign and domestic, within limits which are likely to be feasible. It would be quite unrealistic to plan on expanding

such borrowing over four times by 1971, and over ten times by 1981, in line with the expansion of government investment, so a much larger share must be financed from taxes. It should be remembered that public corporations in the industrial development field will also be heavy borrowers, particularly from foreign sources, throughout the period. Even after full exploitation of the scope for fiduciary monetary issue and possible economy in foreign exchange reserves, the main emphasis must be on tax revenues.

(iv) Agricultural expansion

31. The agricultural sector will not keep pace with the overall growth of the economy; there will be relative shift away from agriculture as a source of outputs and incomes. Nevertheless, the planned rate of growth of agricultural output must be higher than the rates recently achieved. A 6.7% annual rate of growth in monetary agricultural product is suggested. Within the agricultural sector there will be a slow but steady shift away from dependence on export markets and toward the domestic market.

32. Although this decline in the relative importance of agricultural exports as an income source will be persistent, and cumulatively will change the importance of agricultural exports from about a third of overall gross domestic product to less than a quarter, the rate of growth in the volume of agricultural exports must still be some 25% higher than the long-term trend. Agricultural exports must continue to be the main source of foreign exchange earnings, which form the means of acquiring the machinery and equipment for industrial expansion, as well as the most direct way of raising incomes for the bulk of the population.

33. Any prediction of prospects for agricultural export earnings is made difficult by uncertainty regarding future export prices. In the past Uganda has suffered greatly from declining prices in her export markets. Part of this experience resulted from the adjustment from the very high price levels of the Korean War commodities boom, and future price declines are unlikely to be of the magnitude experienced in the mid-1950's. However, it would be foolhardy not to make a substantial allowance for future price declines. The adjustment made here is for a 1% decline in agricultural export prices per annum.

34. Future returns from agricultural exports are dependent not only on the behaviour of world prices but also on Uganda's success in adjusting her outputs to fit changing price conditions. If agricultural output expansion can be biased toward products with firmer price prospects, the resulting revenue performance may be expected to be more favourable than in the past, in which Uganda has been notably unsuccessful in making such shifts. Agricultural planning will therefore be concerned as much with influencing the composition of output as with expanding the total physical volume.

35. An important element of possible future structural change which ought to be investigated further is the changing character of agricultural inputs. Uganda has in the past made only meagre use of fertilizers, insecticides, and agricultural machinery. Sharp changes in these patterns would have an effect on the future import bill, and might increase the possible range for local manufacturing, particularly of chemicals.

36. The shift toward domestic markets in the agricultural sector will come partly as a result of the increased demand for agricultural inputs in the manufacturing sector (e.g. the growing demand for cotton for local manufacture) and partly as a result of increased production of food products for sale (as a result of substitution for existing food imports and of the increasing urban population).



D. The economy in 1981.

37. The economy which will emerge by 1981 if the development effort is successful may be pictured more easily if it is compared with the economy in 1962. Such a comparison is offered in Table 4 and Diagram 2. The main points are:

- gross domestic product in the monetary economy will be 4.6 times as high
- non-agricultural product will rise from 53% to 65% of monetary GDP
- non-monetary product in agriculture will fall from 29% to 14% of total GDP
- construction is the most rapidly growing industry, growing thirteen-fold, followed by manufacturing, with a seven-fold expansion; taken together construction and manufacturing will double their relative importance in the economy
- agriculture expands rapidly with a three-fold increase in product, but declines in relative importance; the domestic market rises from 25% to about 38% of agricultural sales
- gross investment expands ten-fold, reaching four times the 1962 levels by 1971, and utilizing twice the present share of monetary GDP

38. It is not possible at this stage to estimate the relative size of the particular manufacturing industries which are likely to be operating in Uganda in 1981; this will depend partly on the pattern of East African specialization which develops. A tentative judgement would be that as much as two-fifths of manufacturing product could be derived from the textile and clothing industry, with the construction materials industry playing almost as important a role. Detailed study of this question should form one of the most important parts of the work on the five-year plans.

39. This changing internal structure will be combined with a changing relationship between Uganda and the world economy:

- import substitution will reduce imports from 52% to 25% of gross domestic product
- despite the substantial import substitution, the value of imports in all the major classes will at least double (although the product-mix within classes will change)
- changes in the composition of imports by major classes will be marked; changes are particularly noticeable in the case of equipment (rising from 14% to 36% of total imports) and manufactured consumption goods (falling from 54% to 32% of total imports)
- the composition of consumer goods imports will shift sharply away from non-durables
- with exports increasing in value a little less than three-fold and imports expanding more than three-fold, the balance of trade will change adversely by about £10 million; this will require an increase in annual foreign borrowing of about that amount, net of increased payments on past borrowing and any other increases in payments for invisibles

40. The changing pattern of government revenue and saving may be summarized as follows:

- tax revenues increase about five-fold, and the share of government revenue in domestic product rises from 20% to 24%

- the projection assumes little change in composition of tax revenues, but this depends on adjustment of customs duties to raise larger revenues despite the shift toward capital equipment imports; the possibility exists that other taxes may have to increase in relative importance
- government current expenditures do not rise as fast as revenues, allowing for much increased government saving
- in addition to higher government saving, however, it will be necessary to increase government borrowing from £5 million to £15 million annually, net of carrying charges on the past debt

41. An illuminating comparison can also be made with the situation which would exist if the conditions for doubling per capita income, as listed in Table 3, were not fully carried out. The alternative "moderate-growth path" might consist of 4% (the long-run trend) instead of 5% annual growth in the volume of agricultural exports, 10% instead of 50% import substitution, a rise in the share of investment in gross domestic product to 26% rather than the 32% of the high-growth plan, and tax rates increasing by 15% instead of 30%. Such a programme could be viewed as a less ambitious alternative, although it would still be a more energetic expansion effort than Uganda has achieved in recent years.

42. What would be the characteristics of such an alternative programme? The main points of contrast would be:

(i) Per capita income would not be doubled, although growth would accelerate compared with the 1958-1962 experience. Monetary GDP would grow at 6.4% per annum, resulting in a 50% increase in per capita output by 1981 rather than the desired doubling.

(ii) The change in industrial structure and the composition of imports would be far less striking.

(iii) The small degree of import substitution not only limits the shift towards manufacturing, but because of rising requirements for equipment actually permits the share of imports in gross domestic product to increase from 32% to 34%.

(iv) As a result of the rise in imports and the poorer agricultural export performance, the balance of trade changes adversely by about £25 million, requiring an impossibly large increase in annual foreign borrowing. A high percentage of import substitution seems to be an essential condition for creating rapid growth within a bearable balance of payments.

(v) Tax Revenues would rise a little faster than current expenditures, permitting some government saving, but with the expansion of government investment to 16 million in 1971 and 33 million in 1981, government borrowing would have to rise to about 25 million annually, which again seems impossibly large. More government savings is also an essential condition for a high-growth path.

43. A conclusion suggested by this comparison is that although the high-growth objective is in some ways more demanding, it is in other ways more feasible. The various parts of a high-growth programme based on structural change reinforce each other, while the achievements which can be expected are considerable enough to make the effort worthwhile.

H. The period of acceleration

44. If the objective of doubling per capita income by 1981 is to be achieved, then the high-growth path will have to be attained by 1971. Is this possible? For it to become so, the next five-year plan will have to be a good deal more ambitious than the first. On the basis of the analysis presented here, government investment will have to be raised to something like £23 million a year, other public and private investment will have to be expanded correspondingly, the tariff structure and other tools of government policy will have to be adjusted promptly to stimulate extensive import substitution, tax rates will have to be raised something like 30%, agricultural exports will have to be expanded more rapidly than in the past, and structural changes throughout the economy will have to be accelerated.

45. There are, however, good reasons to suppose that more ambitious targets could be achieved in the next plan. There is some evidence that the Uganda economy has been operating with considerable reserves of productive capacity during recent years. This is clearly the case in terms of the availability of labour and of plant capacity in some industries (e.g. cement). Moreover, the sharp increase in the value of agricultural exports, and hence domestic incomes, in 1963 has provided a cushion from which it will be easier to expand saving and taxes than from the depressed base of 1962. Finally, during the recent years of transition much of the administrative energies in society have been devoted to political reconstruction, with considerable turmoil in the administrative system. In the future new recruits to the stock of high-level manpower can increasingly be allocated to tasks of economic expansion and innovation.

46. Despite these optimistic portents the size of the task ahead is enormous. The period of "shifting of gears" will require an expansionist outlook at all levels of society. At the outset it will require an effort of imagination and leadership to dramatize for everyone involved in making economic decisions the extent of economic change required during the next plan as immediate steps toward 1981 goals.

F. Employment

47. Our treatment of objectives and structural change so far has been largely concerned with expansion of output and mobilization of capital resources. Even in this initial "broad view", however, we must offer some comment on the place of manpower in the 1981 perspective.

48. Manpower comes into the plan in two ways. On the one hand the question must be raised whether there is enough manpower available to produce the desired outputs. In Uganda there is not likely to be any shortage of unskilled manpower, but there will be a continuing problem of ensuring an adequate supply of the right quantities and types of skill, particularly for people with secondary and higher education. This question is largely the province of detailed manpower and educational planning, starting from a finer analysis of the industrial composition of future development on the way toward 1981 goals.

49. On the other hand, the question can be reversed and posed in the form, "Is the planned growth providing enough job opportunities to satisfy popular aspirations?" This question is likely to be particularly pressing for people with primary education or less. Here we can say something meaningful even in aggregative terms.

50. Non-agricultural employment has declined in Uganda since 1958, with the net result that in the decade ending in 1962 non-agricultural employment grew by less than 5%. The reason for this discouraging performance was partly the slow growth in output and

partly the rise in productivity per worker. As productivity rises the same output can be produced with fewer workers. The data available are not good enough at present to be very precise in analysing changes in productivity. It seems that output per worker in non-agricultural activity has risen at between 4% and 6% per year during the period 1954-1962; the reported figures tell a somewhat different story according to the time-period studied. If this trend in productivity continues in the future, then it would take a 5% annual increase in output of the non-agricultural sector just to maintain employment at the existing level.

51. The employment problem is compounded by population growth. For the past decade the proportion of the total population employed in wage-paying jobs in Uganda has been declining. In the future it may be expected that the number of people aspiring to paid employment will grow faster than the total population, partly as a result of the expansion of primary education. Moreover the economy currently provides many fewer jobs than would be desirable, in view of the number of unemployed and semi-employed. Therefore, for the future, ensuring a high rate of expansion of employment opportunities may be quite as urgent a goal as expanding output per capita.

52. The desire to increase employment opportunities faster than population is another justification of the high-growth objective. If past trends persist, a rate of growth of non-agricultural output of less than 7.5% per year would most likely only keep job opportunities in line with the growth of population. On the other hand, achievement of the 1981 goals would imply an increase of non-agricultural output of 9.5% per annum, which should enable employment to grow significantly faster than population, as explained below.

53. The employment effect depends not only on the overall growth of output and the rate of growth of productivity within each industry, but also on the shift in the composition of non-agricultural output between industries. If there is a shift in output towards industries which use relatively more labour, average productivity in the non-agricultural sector will rise more slowly and the employment resulting will rise more rapidly. The major shift of that character which occurs in the projected pattern of output expansion is the marked growth in the share of construction. In 1962 construction accounted for only 7% of total non-agricultural output but provided 17% of total non-agricultural employment. Allowing for the major shift toward the construction industry and using the assumption that the rise in productivity in all industries will average 5% per annum, the projected growth of non-agricultural activities would be such as to employ a work force 2.9 times that of 1962 by 1981. This represents a rate of growth of 5.7% per annum, which is over twice the projected rate of growth of population. Thus achievement of the high-growth objectives for 1981 might bring about a significant improvement in the employment situation, something which has not been achieved in recent years.

DIAGRAM 1  
FUTURE GROWTH OF CONSUMPTION AND  
OTHER CURRENT USES UNDER  
"HIGH GROWTH" AND "LOW-GROWTH"  
PROGRAMMES

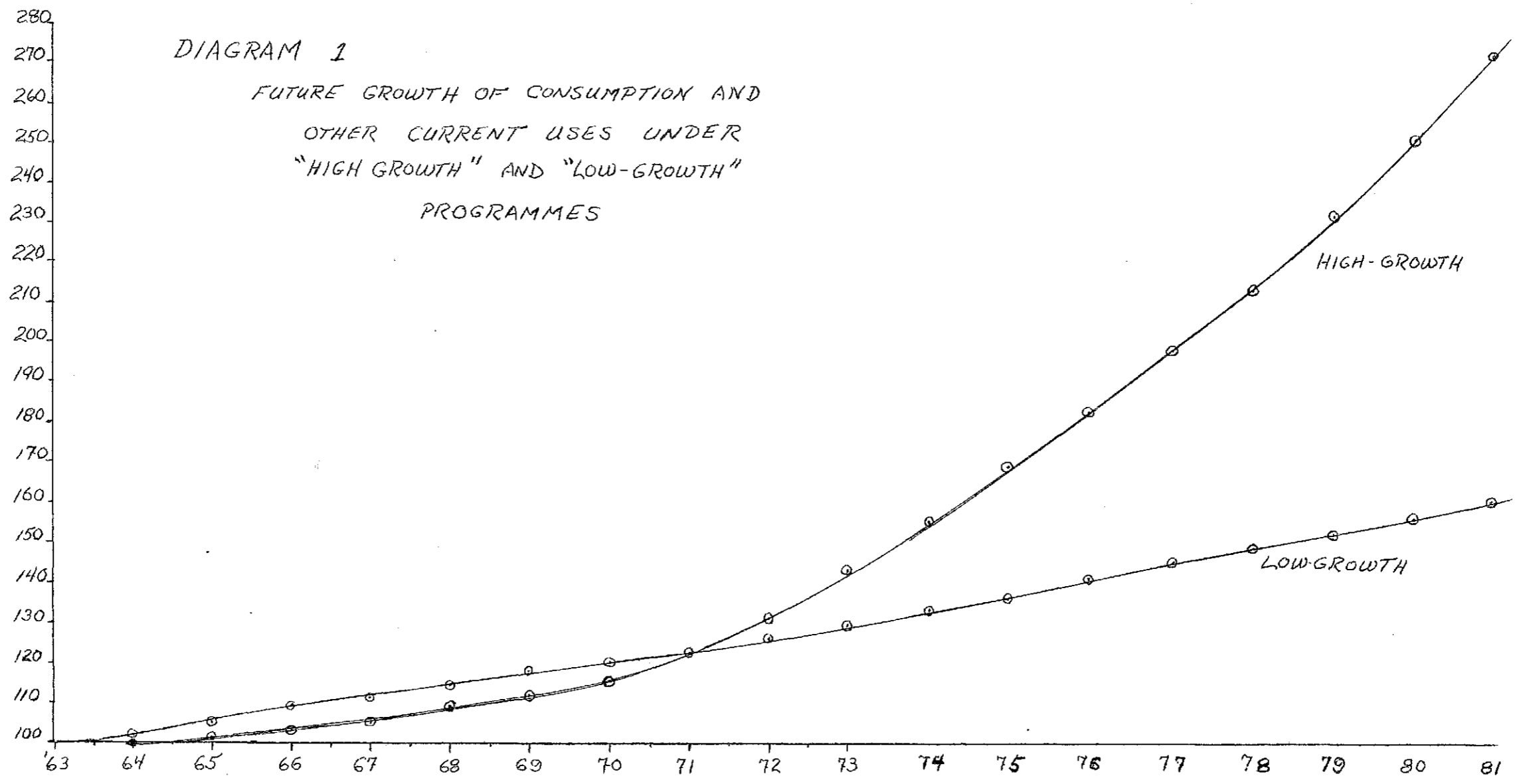


DIAGRAM 2

CHANGE IN STRUCTURE OF THE ECONOMY BETWEEN 1962 AND 1981

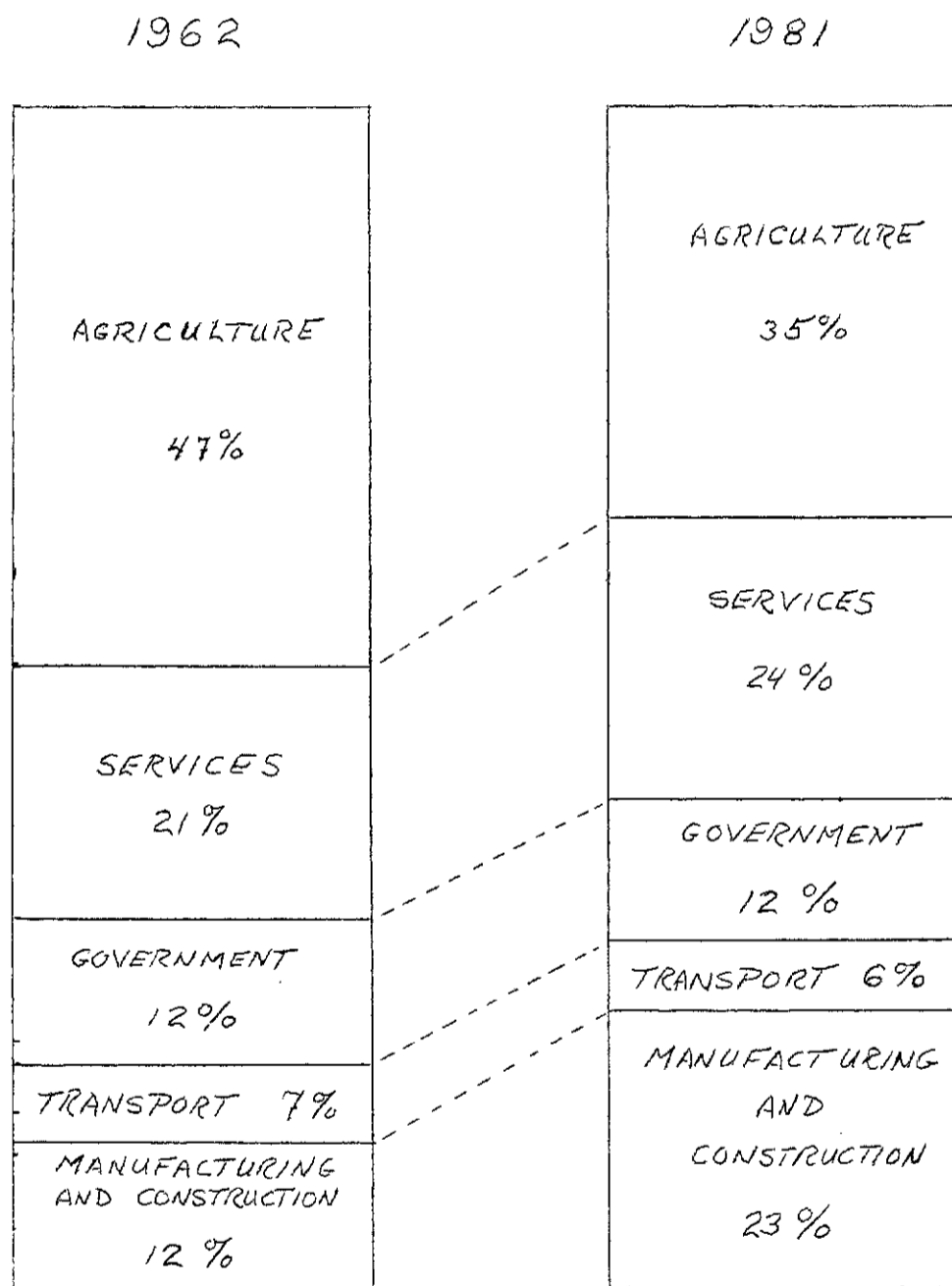


TABLE 3.1.

CAPITAL FORMATION AND GROSS DOMESTIC PRODUCT -  
EAST AFRICA, 1954 - 1962.

Year	<u>Monetary Gross</u>	<u>Gross Capital</u>	<u>Capital Formation</u>
	<u>Domestic Product</u>		<u>as percentage of</u>
	£ million		<u>G.D.P.</u>
			%
1954	286.2	75.7	26.5
1955	320.2	91.7	28.6
1956	337.3	90.8	26.9
1957	356.6	90.1	25.3
1958	359.8	82.3	22.9
1959	375.7	79.2	21.1
1960	400.3	83.6	20.9
1961	404.0	74.0	18.3
1962	409.7	75.6	18.5

Sources: This table is based on the official estimates available in the Annual Statistical Abstracts for Kenya, Uganda and Tanganyika and from the East African Statistical Department's Economic and Statistical Review. Capital formation does not include subsistence activities, for which an estimate is offered in the Tanganyika accounts. There is some difference in definition of capital formation in the accounts of the three countries. The most serious difference is that private automobiles are excluded from the definition in Uganda but included in Kenya and Tanganyika. In this table the practice of the East African Statistical Department is adopted and no adjustments are made for these differences. They are likely to create error mainly when inter-territorial comparisons are made.

The data do not include estimates for Zanzibar.

TABLE 2.

## PUBLIC AND PRIVATE SHARES OF CAPITAL FORMATION IN UGANDA.

( MILLIONS OF POUNDS)

	TOTAL	PRIVATE	PUBLIC * AUTHORITY *	GOVERNMENT**	GOVERNMENT AND PUBLIC AUTHORITY AS % OF TOTAL
1954	18.6	4.1	8.5	5.9	77.4
1955	23.2	7.0	10.0	6.2	69.8
1956	21.8	8.4	6.0	7.3	61.0
1957	20.4	7.9	4.5	8.0	61.3
1958	19.6	7.5	4.0	8.1	61.7
1959	17.1	6.0	3.9	7.2	64.9
1960	17.0	6.1	4.2	6.7	64.1
1961	16.0	5.7	4.1	6.2	64.4
1962	15.4	4.5	5.0	5.9	70.8

\*Including E.A.C.S.O., U.E.B and U.D.C.

\*\* Central and Local Government.

SOURCE: Uganda Annual Abstracts of Statistics.



TABLE 3.

ESTIMATED CONDITIONS FOR DOUBLING PER CAPITA INCOME 1966-1981.

<u>Condition.</u>	<u>Implications.</u>
1. <u>Monetary GDP</u> increases 8.4% p.a. after 1966, i.e. 4.6 times 1962-81	Population increases at 2.6% p.a. Non-monetary product increases at 4.7% p.a. Monetary product increases 19% in 1963, 4% p.a. 1963-66, both adjusted for export prices.
2. <u>Real agricultural exports</u> increase 5.0% p.a. after 1963, i.e. 3.2 times 1962-81.	Rate of increase is 25% higher than actual average rate (at 1960-62 prices) from 1949/50 to 1962/63, despite likely effect of Coffee Agreement on quantity.
3. <u>Agricultural export prices</u> decrease 1% p.a. after 1963, i.e. to an index of 88.5 in 1981 (1960-62 = 100)	Rate of decrease compares with 3% p.a. 1954-63, no change 1949/50-1962/63; assumes Coffee Agreement stabilizes prices on quota sales.
4. <u>Manufactured exports</u> increase 7% p.a. less £3 mil. decrease in copper, i.e. 3.1 times 1962-81.	Rate of increase approximately equivalent to £3 mil. every 4 years, as 1954-58 and 1958-62.
5. <u>Government expenditures</u> increase 7% p.a., i.e. 3.6 times 1962-81	Rate of increase approximately double that in 1958-62, somewhat less than 1954-58.
6. <u>Import substitution</u> replaces half of imports of food, manufactured consumer goods and intermediate goods, three-fourths of construction materials, none of vehicles, fuel, equipment.	Substitution compares with almost none 1954-62. Imports replaced are about £12 mil. at 1962 level of GDP, £37 mil. at 1981 level.
7. <u>Capital formation</u> increases to 32% of real GDP within period of 2nd 5-Year Plan.	Share of capital formation compares with 14% in 1962, 28% in 1955. Required capital formation is derived from relationships approximating a capital-output ratio of 3.0 and a retirement rate of 7% of GDP.
8. <u>Tax rates</u> increase about 30% on average within period of 2nd 5-Year Plan.	Increase for taxes other than export taxes is about double recent trends in effective yields, and is highest for customs duties, next for indirect, next for direct. Increase for export taxes offsets effect of falling prices.

table 4.

## ESTIMATED EFFECTS OF DOUBLING PER CAPITA INCOME 1966 - 1981.

	1962 (mil.£)	1981 (mil.£)	Ratio of 1981 to 1962	Annual Rate of Growth (%) 1962-81	Share of Total (%) 1962 & 1981
GDP, monetary economy	106.4	484.7	4.6	8.2	
Real GDP <sup>a</sup>	105.6	498.4	4.7	8.5	
Agricultural product	49.9	170.5	3.4	6.7	47 -35 <sup>d</sup>
Non-agricultural product	56.5	314.2	5.6	9.5	53 -65 <sup>d</sup>
Construction product <sup>b</sup>	3.9	51.0	13.2	15.7	4 -11 <sup>d</sup>
Manufacturing product	8.6	57.7	6.7	10.6	8 -12 <sup>d</sup>
Services product <sup>b</sup>	2.8	114.7	5.0	8.9	21 -24 <sup>d</sup>
Government product <sup>bc</sup>	13.4	58.9	4.4	8.1	12 -12 <sup>d</sup>
Transport product	7.8	31.9	4.1	7.7	7 - 6 <sup>d</sup>
Gross investment	15.4	157.9	10.2	(17.8) <sup>e</sup>	
Construction	8.3	93.4	11.2		
Equipment	7.1	64.5	9.1		
Government investment	4.9	54.3	11.1	(18.8) <sup>e</sup>	
Gross invest./Real. GDP	(14.6%)	(31.7%)			
Real agricultural exports <sup>g</sup>	37.7	119.2	3.2	6.2	
Agricultural exports	38.5	105.5	2.7	5.4	
Manufactured exports	6.2	19.4	3.1	6.2	
Mfd.import substitution <sup>f</sup>	-	37.2			
Food imports	5.2	11.3	2.2		15 - 9 <sup>g</sup>
Mfd.consumer imports	13.3	28.8	2.2		39 -23 <sup>g</sup>
Vehicle imports	2.8	12.1	4.3		8 -10 <sup>g</sup>
Intermediate imports	3.8	11.4	3.0		11 - 9 <sup>g</sup>
Fuel imports	2.3	10.8	4.7		7 - 9 <sup>g</sup>
Construction mat. imports	1.6	4.7	2.8		5 - 4 <sup>g</sup>
Equipment imports	4.9	44.4	9.1		14 -36 <sup>g</sup>

Table 4 continued next page.

TABLE 4 (cont'd)

	1962 (mil.£)	1981 (mil.£)	Ratio of 1981 to 1962	Annual Rate of Growth(%) 1962-81	Share of Total (%) 1962 & 1981
Total exports	44.7	125.0	2.8	5.6	
Total imports	33.9	123.6	3.6	7.0	
Balance of trade (E - M)	+10.7	+ 1.4			
Imports/GDP	(31.9%)	(25.5%)			
Direct tax revenue	4.0	19.7	5.0		18 -17 <sup>h</sup>
Export tax revenue	3.0	16.9	5.5		14 -14 <sup>h</sup>
Customs revenue	7.7	43.7	5.7		35 -37 <sup>h</sup>
Indirect tax revenue	7.1	58.0	5.4		33 -32 <sup>h</sup>
Govt. current expenditure	22.0	79.6	3.6	7.0	
Total tax revenue	21.8	118.4	5.4	9.3	
Govt. saving (R-G)	- .2	+ 58.8			
Govt borrowing (Igov-Saving)	5.1	15.5			
Revenue/GDP	(20.5%)	(24.4%)			
Consumption & other uses <sup>i</sup>	58.2	245.8	4.2	7.9(5.9) <sup>j</sup>	

Notes:

- a. Agricultural exports at 1960-62 prices.
- b. Projects continuing rise in share of value-added in value of output.
- c. Includes public educational and medical services.
- d. Share of GDP.
- e. Approximate rate of growth to 1971, assuming "steady-growth" rate of investment attained then. Implies 1971 gross investment about £67, gov. investment £23 mil.
- f. Deferred only for changes from 1962.
- g. Share of total imports.
- h. Share of total tax revenue.
- i. GDP + M - E - I - G.
- j. Approximate rate of growth to 1971. Implies 1971 consumption about £98 mil. Note includes large increase in 1963.