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Agricultural Export Developments in East Africa.

A. Importance of Agricultural Exports.

The most crucial objectives of existing development plans in East Africa are first to raise the per capita income of the population in as short a period as possible, and secondly to effect structural changes in the economy through a process of industrialisation. Thus one of the main objectives of the Tanganyika Five-Year Plan is to raise the per capita income of Tanganyikans from the present level of £19.6s per annum to £45 by 1980. At the same time it is also planned to carry through a fairly rapid transformation of the economy by giving more attention to the development of industries: the industrial sector will be expected to grow at a rate more than twice that of agriculture. In the Plan it is stated, (pageX) that "Simply to expand agricultural output, however, will be to condemn Tanganyika to a position of permanent economic inferiority in the world.........We must have an industrial base to our economy".

Agricultural exports contribute to these two desirable aims in three main ways. First of all agricultural exports consititute a very high proportion of the monetary Gross Domestic Product (GDP) of the three East African countries. In Uganda and Tanganyika agricultural exports contribute more than one-third to the monetary gross domestic product and in Kenya their contribution is around 20%. It follows, therefore, that as long as this situation lasts the rate of growth of agricultural exports(in value terms) will continue to affect directly and significantly the rate at which incomes can grow in East Africa. This is especially so since the rate of investment both in the private and public sector depends directly - through farmers' savings and government revenue - and indirectly because of the inducement effect of higher incomes, on the proceeds from exports, of which a large proportion consists of agricultural commodities.

A related point which refers specifically to industrialisation is this that in so far as current expenditures are made out of current incomes, then agricultural exports are important as providing a market for the products of industry. If, as appears almost likely, industrialisation in East Africa is to be based on import substitution rather than on export promotion, then the pace at which industrialisation can proceed will largely be conditioned by the rate at which farmers' incomes, deriving mainly from the export of agricultural commodities, will grow. If the East African countries have got some kind of comparative advantage in the production of a certain range of agricultural products, it is only to be expected that in seeking to effect structural changes in their economies they will have to utilize this advantage - whether natural or otherwise, to its fullest extent; it is one of the surest means they have at their disposal and command for bringing about desired changes in these economies.

Thirdly, in the process of rapid industrialisation even if this is directed towards import substitution, there is a tendency for imports to increase. The tendency is for there to be a change in the composition of imports away from simple manufactured consumer goods, now being produced at home to more complicated and expensive equipment and machinery. In addition if personal incomes are allowed to go up, they will go to buy expensive consumer durables whose domestic production is not yet an economic possibility such as mercedes cars, unless the government takes special steps to control such conspicuous consumption.

It is, however with respect to the availability of foreign exchange to pay for the essential capital goods required for rapid development that developing country after country have had to face a bottleneck and have been forced to scale down their targets. In East Africa, because of the Currency Board setup foreign exchange has not yet emerged as a serious constraint on development, but there is no doubt that once the required institutional changes have been carried through, and as soon as development plans become more ambitious, then most certainly foreign exchange will become a serious handicap. It will be then that exports, of which more than 80% at present comes from agricultural products, will more than ever come to the forefront of planning strategy. Since industrialisation is supposed to be geared to import substitution rather than export promotion, industrial products will not assume a big role in the exports of East Africa within say the next ten years. Reliance will accordingly continue to be based on agricultural exports even after a sucessful scheme of industrilisation has been launched.

B. A Strategy for Increasing Agricultural Exports.

These observations indicate the need for having a rising trend of agricultural exports in value terms. This objective can be achieved by two methods which, however distinct in analysis, are not mutually exclusive and in fact ought to be pursued simultaneously, the emphasis being laid on each depending on the circumstances of the moment. The first one is simply to increase the volume of agricultural exports: with a given level of export prides, foreign exchange earnings are higher the larger the volume of exports. It will be shown below, for instance, that during the last fourteen years the value of Uganda's agricultural exports went up at a much slower rate compared to her East African partners partly because of the relatively slower growth rate of the quantity of her agricultural exports.

The second method necessitates a change in the composition of agricultural exports. As it happens agricultural prices do not merely move up and down, but they also move differently in relation to each other. It then becomes desirable to have a plan of adjusting to these changed patterns of world prices as and when they occur, assuming of course that one is moving from an initial position of equilibrium where marginal returns from various crops grown, both for export and home consumption are equal. The reason for seeking to alter the composition of exports with every change in prices which promises to be of a sufficiently long enough duration is simply that the same volume of exports will bring in less foreign exchange if after price changes, it contains more of the commodities whose prices have fallen compared to those whose prices have risen, depending on the relative importance of each commodity in the total value of exports. This is another way of saying that the terms of trade have moved against one. Since production adjustments in agriculture are typically of long duration, it becomes essential to engage in some form of forecasting these future price trends, particularly relative prices in order to guide policy as to the most profitable combination of agricultural exports, so that production adjustments can be started well in advance. Some guidance as to the period over which maximization of returns is thought desirable will have to be given to justify the decision to change cropping patterns.

In actual practice, it will usually be easier in the short run to do more on the first score: namely adjusting the volume of agricultural output than changing its composition. The former does not involve drastic changes in the existing method of production: relatively simple changes such as paying a higher price to the grower, mounting a propaganda campaign for the increased cultivation of already established crops or the application of a fairly simple input which can be readily applied such as Dudumaki could affect the volume of agricultural exports within a short space of time.

Changes concerning the composition of exports are usually feasible as long-run phenomenon. Two qualifications, however, need to be pointed out in this respect. It is not unusual to get the impression listening to arguments on this subject that major shifts in the economy are implied in a policy directed towards changing the composition of agricultural exports. This need not be so. In an economy which is not fully employed it is possible to increase the production of certain crops, alternatively to to embark on the production of entirely new ones, without bidding resources away from existing enterprises. Thus if coffee prices fall relative to sisal prices there is no need to reduce coffee production in order to produce more sisal. What such a situation could demand, at any rate if coffee price declines are not very sharp and are presumed not to continue downward for too long, would be just a greater emphasis on sisal and less on coffee, while in fact the quantity of coffee exported could be going up at the same time: the only difference in the new situation being that now more sisal compared to coffee is being exported, and also the level of utilisation of resources is higher. Sometimes people argue as though it were necessary to give up coffee production altogether - even uproot existing trees - in the new situation before(more) sisal could be planted.

Secondly, even in a fully employed economy adjustments to new economic circumstances do not necessarily take the form of completely changing the economy: such adjustments usually take place at the margin. C.P. Kindleberg has reminded us that.. "Transformation does not demand shifts of the whole economy from one task to another. The changes occur at the margin...... industires rendered unprofitable by rising costs, declining demand or increased competition from more efficient sources lose factors of production and lose their attraction to entre-preneurs." (2) Of course while adjustment does not have to be total some adjustment is clearly necessary. It is, in fact the limited degree to which transformation, even of the simplest kind can be carried out in a given period of time which constitutes the greatest obstacle to avoiding serious adverse terms of trade movements. At the one extreme, if complete adjustment and transformation were possible with every new situation, then terms of trade arguments would obviously lose their importance. This means that any factor which inhibits this process of transformation, be it social values, or sheer lack of foresight renders a country more subject to these adverse terms of trade which it would have been otherwise possible to avoid. It will be argued below that judged solely on this criteria Kenya's terms of trade of agricultural exports between 1949 and 1962/63 were more favourable than those of her East African neighbours because she succeeded much better than they in effecting some degree of transformation in the composition of her agricultural exports. At the other extreme Uganda was hardest hit by export prices mainly because of the very limited degree to which her portfolio of exports had been transformed.*1

1* This statement does not include judgment as to whether it was less profitable for Uganda not to transform as fast as her neighbours because of the lack of information concerning relative profitability of different crops.

C. East Africa's Experience.

A certain amount of information has been gathered together to give some outline of the experience of the East African countries with respect to their agricultural exports for the period 1949/50 to 1962/63. This historical evidence would in itself be necessary in forming opinions regarding future trends of prices and volume of agricultural exports, say up to early 1970's.

This information is also combined with projections supplied by international agencies, in particular the Food and Agriculture Organisation of the United Nations (FAO) in order to look at the agricultural exports targets contained in existing development plans in East Africa.

As is indicated in tables 3A, 3B and 3C, the historical study is restricted to only twelve commodities which are nevertheless major agricultural exports of the East African countries. For the period 1960-62 these commodities consitituted 73.5% of Kenya's total value of exports, 84.9% of Uganda's and 74.0% of Tanganyika's. In the case of Uganda coffee and cotton dominate total exports to an extent not matched in the other two countries: between them they formed about 76.7% of total exports in this period. In this regard, Tanganyika and Kenya have got a relatively diversified range of agricultural exports, with sisal in Tanganyika (29%) and coffee in Kenya (28.8%) being the most dominant exports.

From table 1,2A,2B and 2C it can be seen that Kenya and Tanganyika have had a higher rate of growth of agricultural exports than Uganda. Table 1 which uses linked quantity indices shows that Kenya had the highest rate of growth of agricultural exports: the increase between 1949/50 and 1962/63 having been 167%. Tanganyika had an increase of 118%, and Uganda 92%. A different ordering of countries is obtained if we use simple Laspeyres's quantity indices, with Tanganyika coming before Kenya but Uganda still coming third. It was, however, realised that Uganda had achieved a higher level of agricultural exports at the beginning of this period compared to both her neighbours such that there was a danger here of exaggerating the percentage increases of the other two if 1949/50 is used as the base. For this reason regression lines were fitted to the simple Laspeyres' quantity indices. It was still found that Kenya and Tanganyika had had a higher rate of growth of ~~quantity of~~ agricultural exports. Thus Kenya's rate of growth was 7.2% per annum, Tanganyika's 6.9% and Uganda's 4.2%.

In the case of Kenya the commodities whose export quantities have grown fastest have been arabica coffee, tea and meat.(table 3A). Those whose quantity increase has been slow were wattle, (a decline of 48%) and hides and skins. Sisal and cotton have increased only very slowly, whereas in the case of pyrethrum it is difficult to make any such categorical statement since there has been a great deal of substitution of extract for flowers during this period for which no allowance has been made, but which would in fact affect the volume figures. Maize does not show any noticeable trend, although at the end of this period more maize was being exported than at the beginning with the exception of the catastrophic year of 1961.

For Tanganyika the most dramatic increases have been recorded in the case of meat and cotton (table 3C). Cashew nuts and ground nuts had the highest percentage increases but the fact that only insignificant quantities were being exported at the beginning of this period exaggerates these percentage increases. Like Kenya, the increase in sisal exports was fairly modest percentagewise, and for this the rapid fall in sisal prices was largely responsible as will be shown later on.

Table 3B shows that Uganda's greatest achievement in this period was in increasing the quantity of her robusta coffee exports by over 100%. Arabica coffee and tea exports also increased fairly fast, but it was the failure of cotton exports to rise which prevented these achievements from being translated into higher growth rates..[2] As will be seen from these tables(3A,3B &3C) none of the other two countries did sustain a decrease in the quantity exported of any of its major exports.

2* Some of Uganda's cotton is now used domestically by the Nyanza Textile Mill at Jinja, but this is still less than 10% of a normal crop.

I am very grateful to Mrs Anne Cooper for these calculations.

In Kenya and Tanganyika sisal exports increased relatively slowly compared to other commodities, but the quantity exported at the end of the period was still about 70% higher than in 1949/50. In the case of Uganda even if we leave out the abnormal year of 1962 when weather conditions played havoc with her cotton crop, we find that the quantity of cotton exported either in 1961 or 1963 was much less than in 1949. As will be evident from table 4, since 1949 cotton acreages in Buganda have been falling almost consistently with the exception of 1961. The 1960 acreage was about one-half of the 1949 acreage. At the same time total acreage for Uganda has not also shown any upward tendency implying that extension of production outside of Buganda has just managed to offset the decline in Buganda, although 1961 and 1962 acreages were significantly above the 1949 figures. For this there are many explanations such as the relatively high returns to coffee compared to cotton and the ease with which coffee cultivation fits into the traditional cropping patterns of the banana growing areas, but we will not delve into this field any further.

Export Prices.

Tables 2A,2B &2C show that during this period price movements have been least favourable to Uganda and least unfavourable to Kenya: Uganda's price index stood 3% below the 1949 level while Kenya's was 25% higher. Tanganyika had suffered severe price declines in between but had started to recover somewhat by 1963 with a sharp rise in sisal prices so that her price index at the end of the period stood at the same level as in 1949/50.

Kenya's favourable price trend is explained mainly in terms of favourable prices for her major exports: arabica coffee, tea and meat. Kenya had succeeded much more than Uganda in transforming the composition of her agricultural exports with emphasis on crops whose prices were rising. At the beginning of the period sisal had been the most valuable export from that country, but in 1952 coffee took the first place, and for some years tea has also exceeded sisal in value. In part this could have been an adjustment initiated in response to falling sisal priceswhich occurred immediately after the Korean War boom of the early fifties. In 1951 the sisal price index was 235 (1960-62 average prices being 100), but had fallen to 92 in 1953 and was 68 in 1957. There was a slight improvement after 1958 but there was nothing like a significant rise in prices until 1963. On the other hand, although coffee prices were also falling, they were not, at any rate for Kenya's coffee, depressed to the same extent as those for sisal,*and in any case tea and meat prices as already noted were rising. In so far as the adjustment was made in response to price forecasts of future prices, this is an example of what a country can to in order to avoid the full impact of deteriorating terms of trade. In Kenya's case we have also to remember that there was a deliberate policy of settling Africans and Europeans on the land and to encourage them to grow high value cash crops, emphasis being placed on coffee, tea and pyrethrum in the African areas and on mixed farming and large-scale ranching in the European areas. These steps were first initiated around 1949, but their operation was more clearly elaborated in 1954 in the form of the Swynnerton Plan for the African Areas and the Troupe Plan for the European Areas. There was thus a strategy for agricultural development at this stage in Kenya.

In the case of Uganda further production of robusta coffee was encouraged even after 1958 when prices were definitely falling. The robusta coffee price index in 1958 was 191 having been 245 in 1954, and was to fall to 93 in 1961. Last year's recovery, desirable as it was brought it to just 120. This was largely due to natural disasters in Brazil when frost destroyed a large part of the crop, and to only a limited extent did it result from the operation of the International Coffee Agreement.

Cotton prices were high for only two years, 1951 and 1952 when the price indices were above 170, but since then price declines have been more gradual compared to coffee prices. Tea prices were a little more steady, but then tea was not yet a major export crop from Uganda: even in 1963 the value of this crop exported was just £2 million.

The effect of price changes on the composition of Tanganyika's agricultural exports was a decrease in the relative importance of sisal from more than 50% of total value of exports in 1949/50 to around 30% in 1960-62. Crops which were now climbing up in importance were tea, meat, cashew nuts and cotton: and for these with the single exception of cotton price changes were extremely favourable as compared to sisal prices. Exports of robusta coffee whose prices were falling just stagnated.

The effects of favourable price trends can be seen from the fact that although Tanganyika had the highest rate of growth of quantity of agricultural exports of about 7% per annum, it was in fact Kenya which had the highest rate of growth of value of agricultural exports (8% per annum), and incidentally of total exports. If the quantity of Kenya'sagricultural exports had not risen between these two dates, then the value of her agricultural exports would have risen by about 25%, the price rise of her agricultural exports. But since the quantity of her agricultural exports went up by 135%, the value of her agricultural exports went up even by a higher percentage. This contrasts with the Tanganyika situation where the value of agricultural exports in this period went up entirely under the influence of rising quantities since her price index was at the same level in 1962/63 as it had been in 1949/50. In this case the increase in the quantity of agricultural exports (149%) is roughly equal to the increase in the value of agricultural exports (153%). For Uganda, however, the value of her agricultural exports increased more slowly than the quantity of her agricultural exports (real exports). This was due to a 3% decline of her price index, which, when superimposed on a slowly rising trend of quantities, resulted in an even slower growth rate of values; and since agricultural exports are such a high percentage of total exports, total export earnings were rising only very slowly. This can also be gauged from the figures for total value of exports in tables 1A and 1B. In 1949/50 Uganda derived twice as much income from her exports as Kenya, but by the sixties their value of total exports was about the same, and in 1962 Kenya's value of exports was 0.3 million above Uganda's. The year 1962 was a very bad one for Uganda's cotton, and in fact in 1963, Uganda's value of exports went up again very fast, due to favourable prices for robusta coffee but even more to more normal crop harvests. The advantages, however of rising prices and quantities of exports can be seen if we try to compare Kenya on the one hand and Uganda on the other; these have operated in Kenya's favour to raise the value of her agricultural exports very fast in contrast to Uganda's position.

D. Projections.

From the viewpoint of agricultural planning in East Africa the information which is most urgently required concerns prices of the commodities which could be exported from this part of the world. This is because for most commodities East Africa is only a small producer and she can therefore plan to export as much as it produces without affecting the price she receives. Other things being equal, crops which it is now profitable to export will even become more profitable to export if their prices go up. In a world free from planning consntraints, production for export will be carried to that point where marginal returns to factors are equalised as between domestic production and production for export.

Thus when export prices alter, there is a need not only to change the composition of exports but also to shift factors between production for domestic markets and production for export in search of a new equilibrium. If cotton prices fall, and other things remain the same, then it becomes necessary to reallocate some factors away from cotton production to either another export crop or to crops for domestic use; a certain amount of the factors will go to each of these lines of production depending on the new cost-return structure.

In this paper it will not be possible to hazard suggestions about the proper allocation of resources between production for export and production for the home market because of the lack of information about net returns to factors engaged in agricultural production in East Africa, large scale estate production excepted. For small-scale farmers the only reliable information we have concerning their economic transactions is about their revenue from exportable crops particularly where the commodity is exported through a marketing board. What one can say is that perhaps too much emphasis has been placed on production for export and that local profitable opportunities have not been exploited to the full: in particular unexploited opportunities still exist whose exploitation awaits the improvement of market facilities, communications, and a greater degree of cooperation with regard to agricultural matters interterritorially.(3)

If, however, foreign exchange is introduced in a planning model as a constraint on development, then it is possible for net returns from exports to diverge from those which could be obtained from domestic sales; in particular we can get a situation where resources employed in the production of export crops would have been more profitably employed in satisfying internal demand. In effect we would be putting a premium on foreign exchange earnings in computing profitability of different projects because of the limiting nature of foreign exchange on development. If foreign exchange targets are known what we have then to work out is the combination of exportable commodities which will enable us to achieve this target with the least possible absorption of resources, in which case considerations of profitability in industries serving the home market are largely irrelevant except where the divergence in returns is really great. Information required for such an exercise would be the course of future costs of production of different crops on the one hand, and the prices at which these various crops will be sold. Projections presented in this paper are intended to provide some tentative suggestions with respect to the latter.

E. FAO Projections.

By and large, agricultural export prices on the world market depend on two things: the forces of supply and demand and institutional arrangements which have got international repercussions. For instance last year's recovery in robusta coffee prices in attributable in part to natural calamities in Brazil's coffee growing areas and partly to the successful conclusion of the International Coffee Agreement. In fact the United Nations Trade Conference which took place in Geneva early this year recommended that commodity agreements were one of the methods of easing the foreign trade problems of developing countries.

The following commodity notes are prepared mainly from FAO. Documents which have been published so far bearing on the subject.(4)(5)(6) It goes without saying that if most countries draw up their plans following these projections more closely, these projections will in all probability be proved wrong. Projections of supplies are the most difficult to make because these are governed by the way individual countries eventually shape their plans. It is pointed out, for instance, in these pulications that if the slightly bright price prospects for tea should attract many countries towards this commodity it is likely that an oversupply problem could easily result with prospects turning out to be poor.

Meat and Meat Preparations and Dairy Products.

Meat consumption is highly responsive to income and price changes. It is, for instance, asserted that consumption of meat has not yet reached saturation point even in North America. The United States has of late become a net importer of meat to about 2% to 3% of its total consumption; and in Western Europe, Italy, the United Kingdom and West Germany are expected to increase their meat consumption pretty fast. Production is unlikely to keep pace with demand in these countries, and even with increased supplies from France and the Netherlands to the other Common Market countries there would still be room for exports from third countries. The greatest obstacle to increased exports from third countries will remain the heavy levies currently imposed on such imports within the Common Market in order to protect their own farmers.

Within the developing countries themselves production is expected to fall far short of demand, and for this reason meat prices are likely to rise since it is unlikely that these countries will be prepared to sacrifice the foreign exchange required to import meat from outside. It is interesting to note in this respect that Kenya which had succeeded in establishing an export trade in meat over the last few years, not only to the outside world but also within East Africa expects that her exports of meat and dairy products in 1970 will be less than what she exported in 1962. Meat exports then will be worth £3.04 million against £3.26 million in 1962. The fall in dairy products will be more striking as the value of these exports is expected to fall from £2.16 million in 1962 to £0.47 in 1970. The explanation given is that increased home consumption is likely to reduce the supplies available for export even if increased production materializes. These two are the only major items under the Kenya Plan whose export level is likely to be below that of 1962.

This makes meat the brightest spot in the field of agricultural exports so long as institutional barriers to international trade can be reduced. It will in fact be beef followed by poultry meat which are likely to enjoy these favourable price conditions. The most appropriate form in which to export the beef would be as canned or hightly processed meat, but tariff policies in most developed countries discriminate against processed meat. There is also a tendency to discriminate against fresh meat at the same time on account of disease, so that there is some room here for negotiations and reform.

The market for dairy products is likely to be restricted to internal consumption because of the very nature of the product itself, but outlets in neighbouring countries could become signifcant in such commodities as butter, cheese and powdered or canned milk if communications as well as trade relations were improved. As with meat the demand for dairy products in developing countries will largely depend on changes in incomes, whereas for the developed countries the main determinants will be population growth as well as income. But the demand for dairy products in developed countries is almost certain to be met from their own sources.

These price forecasts are quite consistent with East Africa's experience sketched above since meat was one of the commodities which had enjoyed rising export prices over the last few years, even if we recognise the fact that this item is an agglomeration of many types of meat.

East Africa's Plans.

For the region as a whole the United Nations Special Fund has agreed to sponsor a livestock development plan. In Kenya a shortfall of beef cattle is expected as a result of a fall in production by settlers. The Kenya Meat Commission expects a shortfall of 26,000 head of cattle by 1966/67, and it is for this reason that a Range Management Division has been established in the Ministry of

Agriculture to promote the development of ranching land. In these circumstances meat exports as already pointed out above are expected to fall in spite of increased production.

In Tanganyika there is no plan to increase livestock numbers as such, but efforts are to be directed towards increasing animal average weight by about 10% and stock off-take by another 10%. Average liveweight is said to be the lowest in Africa, whereas the average off-take is well below the desirable 18%. It is hoped that with these improvements it would be possible to increase livestock production aby about 5% per annum.

In Uganda there is no readily available information about targets for this sector; but there is no doubt that a great deal of emphasis is being put on developing the livestock industry what with the establishment of ranches in Bunyoro and Ankole and the erection of canning factories in the Eastern Region.

Tea.

For the moment there does not seem to be a problem of over-supply of this commodity, but by 1970 it may very well be that the export outlook will be grim. Both in Asia including Japan and in Africa ambitious plans are under way to increase production. (Even South Africa is now developing its own tea plantations in order to avoid dependence on outside sources which, for diplomatic reasons, may sometimes prove unreliable). In the developed countries indications are that tea consumption has almost reached saturation point, and even with price reductions it looks unlikely that demand will at all be stimulated sufficiently. In the low income countries of Eastern Europe and in Russia where tea consumption per capita is still very low, increased supplies are likely to come from within the Sino-Soviet bloc itself: namely from Mainland China. Increased consumption is likely to take place within the developing countries of Africa and Latin America where consumption is responsive to both price and income changes, and consumption levels are still low. A workable strategy for tea exports would accordingly have to aim at increasing the export of cheap plain teas to these markets, while at the same time concentrating on providing high grade tea for the high income markets of Western Europe and North America. One welcome development in this trade was the suspension of all customs duties on tea by the Common Market countries in 1963 as a result of the United Kingdom's application to join the Common Market. Present indications are that the suspension may become permanent.

In Uganda a tea survey team has of late reported to the government, but its recommendations are not yet known to the public. The appointment of the team itself underlines the importance which the government attaches to the development of the tea industry, and in recent years tea planting has greatly been expanded. Radical changes may very well be contemplated with greater participation by small scale farmers in the production and processing of the crop.

In Kenya the government intends to increase the total acreage under tea by another 10,935 acres by 1966 from the present 51,000 acres. Most of this increase will be under small-farm management, the policy being to move away from the present situation where 98% of the tea produced in Kenya is from large estates. This additional acreage is expected to bring in 12 million lbs of made tea by 1971. The total output will be about double the existing output.

Tanganyika's plan is more ambitious is this respect, aiming as it does at more than doubling of the present output from 4,100 tons to 10,500 tons in 1970 and 20,600 in 1980. There is also an assumption in the plan that prices are likely to rise by about 4% by 1970 from the 1960-62 average. This prediction may well be proved wrong if other producing countries succeed in increasing their production very fast. As in Kenya emphasis is to be placed on small-scale production, with the intention of raising small-holder share to 10% in 1970 and to 25% in 1980.

COFFEE

A situation of over-supply has characterized the world coffee economy since about 1955. This surplus situation is expected to continue up to about 1970 when supply conditions are likely to have altered. In fact FAO projections do not indicate any further price declines between now and 1970, while it is intimated that prices are likely to move upward if they ever change at all. This degree of optimism is based on some factors which have emerged of late in the coffee trade. The first is the damage suffered by Parana's coffee areas which may affect production for several years to come. This in itself may induce Brazil to intensify her plans of diversifying the economy. Secondly, in some of the Latin American countries old and uneconomic areas are being abandoned while at the same time no new large-scale plantings have been undertaken in these countries of late. Most of future production increases are expected to come from Africa.

As far as the International Coffee Agreement is concerned, it will then either have succeeded in reducing surplus stocks and output or it will have been abandoned because of the pressure which is bound to be brought to bear upon it from both sides to the bargain. If it does not succeed in clearing the surpluses, it is hard to imagine that consumers will be prepared to go on paying high prices when heavy stocks continue to overhang the market. On the other hand if prices are allowed to fall, this is likely to reduce the attraction of the Agreement to low-cost producers who will continue to be limited as to the quantity they can sell even at these low prices; at the same time the high-cost producers will find that they lose money whether they are in the Agreement or out of it. The low-cost producers are mainly African countries, and compared to countries like Brazil they are much poorer, and therefore their ability to hold on to stocks for long periods is severely limited; this is especially the case when it is realized that the Agreement is more in the interests of the high-cost producers who would have to be squeezed out in the event of falling prices. Should the low-cost producers opt out of the Agreement this is going to hasten a phenomenon which is bound to come sooner or later: namely the reduction of production in high-cost producing countries.

In view of these conjectures it is interesting to have a look at East African plans. Tanganyika intends to nearly double her coffe production from the 1960-62 average of 27,000 tons to 49,000 tons in 1970 and to have increased it by 19,000tons in 1980. No substantial increase in acreage is contemplated, but the yield from existing acreage is to be increased greatly by improved husbandry practices. It is also assumed that prices are likely to go up by about 15% between now and 1970, which perhaps will reflect improvements in quality rather than a rise in prices for the same grades.

Kenya was possibly caught by the Agreement on the wrong foot . Her production was very low when the export quotas were being fixed. Her present quota is a mere 30,100 tons to traditional markets plus 5,000 tons to the United Kingdom. In the Plan it is stated that current production is approximately 37,000 tons, but <u>existing plantings</u> will produce an estimated total exportable crop of 70,000 tons by 1970. In this situation Kenya will need a lot of bargaining within the Agreement before her quota can be raised in order to accommodate most of this increase. Her approach to further planting of coffee is also one of extreme caution and reserve, as she is not a member of the International Coffee Agreement. (Signatories to the Agreement are supposed to enforce restrictions on further planting of coffee).

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Kenya's position on this is that "While further planting must be strictly controlled for the present time, the Government will periodically review the country's coffee acreage and, whenever possible, allow additional planting to take place" (7) Coffee farmers' incomes are expected to be nearly double in 1970 what they were in 1962.

Uganda has much less control over her coffee farmers since there is no system of licensing coffee growers, but as a full signatory to the Agreement she will no boubt abstain from encouraging further planting of coffee and seek avenues of diversification elsewhere.

Sugar and Cocoa.

Sugar and cocoa are commodities in which Uganda is keenly interested but for which it is extremely difficult to make any price forecasts. Kenya is also intending to expand her sugar production, but this is mainly with a view to becoming self-sufficient in sugar rather than to encourage exports. In the same way Tanganyika's increased production will be primarily to satisfy the domestic market for sugar. Since Uganda has been the major supplier of sugar to Kenya and to some parts of Tanganyika, Uganda's increased output will have to find a market outside East Africa by 1970. There must be room for cooperation in this field such that Uganda should continue to supply sugar to the western part of Kenya while Kenya's coastal output is destined for export. Such a proposal has already been made. (8). However market indications are extrmely unclear for this crop since the most likely tendency will be for the developed countries to continue to subsidies their own sugar beet producers instead of becoming more dependent on overseas suppliers for their supplies. East Africa's export quota is a mere 5,500 long tons out of a total of 1,559,800 long tons.* It is not, therefore, possible to see what outlets there will be for Uganda's increased output.

Uganda is also interested in cocoa production and experiments have already been carried out to find out the suitability of cocoa to Uganda's natural conditions. Next year it is planned to plant an additional 560 acres on top of the existing 360 acres, and the first lot of exports will go out then. But the future of the cocoa market is very difficult to assess at the moment. Last year a conference which was called to negotiate a cocoa agreement failed to agree on a minimum price below which export regulations should be applied. It also looks as though chocolate consumption in developed countries has been carried to a stage near saturation point so that future outlets must be sought in developing countries.

COTTON

Cotton is an annual crop and so it is very difficult to estimate what supplies in the very distant future are likely to be. Like all agricultural raw materials, however, the cotton trade is going to face two problems: 1. competition from man-made fibres, 2. technological improvements which have reduced the raw material content per unit of final output. The cotton market will also have to face support policies of the United States in so far as her stockpiles spill over into international trade channels in the form of concessional sales.

Competition from man-made fibres is going to prove the greatest threat becasuse the disadvantage to which cotton is put by these synthetic fibres is not primarily one of price competition; rather it is that the artificial fibres possess texture qualities desired by the consumers but are absent from the natural commodity. This makes the artificial product superior to the natural with the result that the natural product can only be

* This is E.A.'s quota under the Commonwealth Sugar Agreement.

sold at very heavy discounts. The effects of technological improvements are much more difficult to assess since progress in scientific research and innovations are hard to predict. Similarly it is not possible to predict what proportion of her cotton stocks the United States Government will decide to release: the actual level of surplus stocks depends on power politics within the United States itself, in particular the intensity of the pressure brought to bear upon the Administration by farmers' pressure groups. How much of these stocks can eventually be released on concessional terms is a matter of high level diplomacy, while the quantity the Government decides to sell on commercial lines is also hard to predict. Repercussions on East Africa's cotton exports could in some cases be serious as when last year's Uganda crop had to be disposed of in larger quantities to Mainland China because India, who is our main customer had obtained large shipments of cheap cotton under Public Law 481.

Some of these considerations suggest that cotton prices are likely to remain weak, and competition from man-made fibres will remain an important factor. (The United States Government has decided to combat some of this competition by giving a subsidy to domestic mills equal to the export subsidy, This might make cott clothing more competitive with rayon).

The production target for cotton in Uganda remains 540,0 bales: the nearest we have ever come to this figure was in th 1937/38 season when production was 402,000 bales! Present production is approaching this latter figure, and in fact most of the group farms already established are based primarily on cotton as the first crop to go in.

The most ambitious scheme in Kenya is to raise cotton production almost tenfold by 1970. Cotton exports were valued at £0.44 million in 1962, but they are supposed to have climbed to £4.46 million by 1970. A three-fold increase in yield is contemplated to be achieved by applying more fertilizers and known techniques of good husbandry. It is also planned to grow cotton under irrigation on the Tana River while average yield per acre of seed cotton is at present about 200 lbs to the acre, it is planned to increase this to 600-700 lbs. It is of interest to note that pilot irrigation schemes on the Tana River have already given yields as high as 1,500 - 2,000 lbs to the acre.

Tanganyika expects a secular fall in cotton prices, but nevertheless plans to nearly treble her 1960-62 average cotton output by 1970, and to produce six times as much cotton in 1980 as the 1960-62 average. Some cotton will also be produced under irrigation, but it is planned to maintain Tanganyika's competitive position in overseas markets by reducing the average cost of production.

Sisal.

Sisal is the most valuable export crop from Tanganyika, and it is also an important export of Kenya constituting about 12% of the total value of her exports. Unfortunately it is not possible to give any indication of the likely trend in prices over the next few years because of the many factors involved about which we at present know very little. The difficulty of estimating future supplies apart there is the other difficulty of saying anything meaningful about the demand side. The main outlets for sisal are in agricultural twines, the demand for which varies with the level of agricultural activities. Though sisal has not suffered significantly from synthetic substitution, it has had to face the threat of technological changes as when reaper-binders are being gradually replaced by combine harvesters in developed countries; at the same it is probable that developing countries will side-step reaper binder stage and go on to combine harvesters directly.

The demand for sisal is likely to be sustained by the demand for baler twine in European countries and North America. Sisal being cheaper than abaca there is a tendency for the prices of sisal to move in sympathy with abaca prices, but sisal has the advantage that when abaca prices rise people tend to substitute sisal for abaca, so that during boom years sisal exports can expand substantially. On the other hand during periods of low prices substitution is the other way. This phenomenon has been most noticeable in Japan.

Uganda has never taken up sisal seriously; the quantity exported in 1963 was about one-third of what it had been in 1951. But we now understand from the President's Policy Speech two weeks ago that in the quest for diversification sisal production is to be expanded in areas which have been found suitable for its growth.(10)

Tanganyika's sisal plans are not very ambitious. She is the world's largest producer of sisal, producing about 40% of the world's output and so her volume of exports could affect the world price for this commodity. She intends to increase her production by just 35% above her 1960-62 average by 1970, and by another 30% by 1980. The price rise she expects up to 1970 is however of the order of 30% and a decline of about 11% between 1970 and 1980. One wonders whether it would not be better to expand output even faster in the first period and take advantage of favourable conditions while they last. Even if her own production will mean a fall in the export price, it is doubtful whether the fall would be very great compared to the increase in sales. This might be a better strategy than expanding production after 1970 by 30% when prices will be falling - assuming of course that the price forecasts in the plan are fairly accurate.

.Kenya plans on a more ambitious programme of sisal exports than Tanganyika although perhaps this depends on the figures one is looking at. Under table 4 page 134 of the Kenya Plan sisal exports will rise from £4.32 million in 1962 to £6.82 million in 1970. This clearly is not ambitious. But on table 49 table 1. of the same document the return to sisal producers is expected to rise from £4.52 million in 1962 to £8.50 million in 1970. This could imply that more sisal will be utilized locally within East Africa or that sisal producers are going to be subsidised, or perhaps that the sisal will be transformed into other commodities before being exported. No indication of any of these possibilities being the case can, however, be found in the Plan itself.

Conclusion.

This tentative summary outline of future outlook was intended simply to highlight some of the most important factors which are likely to affect the trading position of the main crops exported from East Africa. While its tentative nature must be kept in mind, it is perhaps its line of approach which it has got to commend to people engaged in planning in East Africa. More reliable information can always be filled in as and when it becomes available.

TABLE 1.:

EAST AFRICA: LINKED QUANTITY INDICES FOR AGRICULTURAL EXPORTS, 1949/50 TO 1962/63.

	KENYA: (1961 = 100)	% change[a]	UGANDA: (1962 = 100)	% change[a]	TANGANYIKA (1962 = 100)	% change[a]
1949	38		60		52	
1950	44		58		47	
1951	44		65		55	
1952	54		66		64	
1953	45		59		67	
1954	47	15%	69	17%	72	45%
1955	65		84		75	
1956	73		85		92	
1957	69		93		80	
1958	81	+73%	96	39%	89	24%
1959	84		101		87	
1960	98		115		98	
1961	100		110		88	
1962	103	+35%	100	18%	100	21%
1963	116		126		116	

Notes: (a) Percentage changes are calculated from the previous date underlined.

(b) Percentage changes in quantity for the period 1949/50 to 1962/63 were: Kenya 167%, Uganda 92% and Tanganyika 118%.

TABLE 2A.

KENYA: Changes in Total and Agricultural Exports in selected sub-periods 1949/50 - 62/63.

	1949/50(Av)	1954	1958	1962/63(Av.)	1949/50-1962/63.
Total Exports £'000	14,073	20,260	29,300	40,873	- -
% Change from previous date	-	+44	+45	+39	+19[illegible]
Agricultural Exports £'000	10,818	15,642	23,617	32,[illegible]44	-
% Change from previous date	-	+45	+51	+36	+196
Agricultural Exports at 1960-62 Prices £'000	13,275	14,365	24,071	30,876	-
% Change from previous date*	-	+8	+68	+28	+135
Price Index 1960-62 = 100	83	109	98	104	-
% Change from previous date	-	+31	-10	+6	+25%

* Changes in this variable can be regarded as reflecting changes in the quantity of exports.

TABLE 2B.

UGANDA: CHANGES in Total and Agricultural Exports in selected sub-periods 1949/50 – 62/63

	1949/50(Av.)	1954	1958	1962/63(Av.)	1949/50 – 1962/
Total Exports £'000	26,051	40,575	45,409	44,555	–
% Change from previous date		+56	+12	–2	+56
Agricultural Exports £'000	23,348	36,582	40,848	38,411	–
% Change from previous date	–	+57	+12	–6	+65
Agricultural Exports at 1960–62 Prices £'000	21,984	25,909	31,429	36,859	–
% Change from previous date*	–	+18	+21	+17	+68
Price Index 1960–62 = 100	107	141	130	104	–
% Change from previous date	–	+32	–8	–20	–3

* For notes see Table 2A.

TABLE 2C.

TANGANYIKA: Changes in Total and Agricultural Exports in selected sub-periods 1949/50 - 62/63

	1949/50(Av.)	1954.	1958.	1962/63(Av.)	1949/50.-1962/63.
Total Exports £'000	21,501	36,251	41,707	57,397	-
% Change from previous date	-	+69	+15	+38	167
Agricultural Exports £'000	17,080	27,934	29,680	43,221	-
% Change from previous date	-	+64	+6	+46	153
Agricultural Exports at 1960-62 Prices £'000	15,882	24,281	32,466	39,981	-
% Change from previous date*	-	+53	+34	+23	149
Price Index 1960-62 = 100	108	115	91	108	-
% Change from previous date	-	+6	-21	+19	0

* For notes see Table 2A.

TABLE 3A.

KENYA: PERCENTAGE CHANGES IN VALUE, QUANTITY AND PRICE OF INDIVIDUAL AGRICULTURAL EXPORTS 1949/50 - 62/63. (1)

	1949/50 - 54.			1954 - 58.			1958 - 62/63.			1949/50 - 62/63.		
	V.	Q.	P.	V.	Q.	P.	V.	Q.	P.	V.	Q.	P.
Ar. Coffee (28.8)	+128	+24	+90	+82	+131	-21	+4	+35	-22	+339	+281	+16
Tea (12.5)	+101	+39	+43	+56	+67	-8	+69	+74	-2	+429	+308	+31
Sisal (12.1)	-41	-7	-36	+9	+29	-17	+166	+43	+86	+72	+73	-2
** Pyrethrum (8.5)	0.9	0.2	0	+443	+91	+188	+71	-10	+90	+736	+75	+448
Meat (6.4)	+102	+115	-9	+255	+166	+35	+117	+49	+49	+1462	+208	+64
Hides & Skins (4.3)	-8	-14	+9	-29	-3	-27	+24	+38	-10	-18	+16	-28
Wattle (2.0)	+87	+14	+61	-41	-30	-16	-25	-35	+22	-17	-48	+64
Cotton (1.8)	+234	+194	+12	-36	-19	-20	-15	-15	-	+83	+103	-10
Maize* (1.1)	-	-	-	+84	+90	-3	-31	-26	-7	+238	+326	-7
Cashew Nuts* (0.7)	-	-	-	-	-	-	+47	+102	-27	-	-	-
Ground Nuts* (0.3)	-	-	-	-	-	-	+44	+42	-1	-	-	-

* Large Percentage changes due to small initial values are excluded from the table.

** 1950 is used instead of 1949/50 average

(1) Commodities are listed in order of importance of their value and the figures in brackets after each product indicate the percentage of the value of total exports constituted by the particular commodity for the period 1960 - 62.

TABLE 3B

UGANDA: PERCENTAGE CHANGES IN VALUE, QUANTITY AND PRICE OF INDIVIDUAL AGRICULTURAL EXPORTS 1949/50 to 1962/63. (1)

	1949/50 - 54.			1954 - 58.			1958 - 62/63.			1949/50 - 62/63		
	V.	Q.	P.	V.	Q.	P.	V.	Q.	P.	V.	Q.	P.
Robusta Coffee (36.9)	+135	+33	+80	+66	+112	-22	+12	+87	-41	337	421	-17
Cotton (33.7)	+22	+6	+13	-14	-1	-11	-38	-34	-4	-34	-31	-4
Ar. Coffee (6.1)	+222	+121	+71	+1	+36	-16	+47	+116	-32	386	545	-14
Tea (4.2)	+306	+148	+40	+3	+9	-5	+106	+111	-1	765	470	+32
Hides & Skins (2.6)	+22	+14	-38	+2	+25	-43	+45	+56	-8	81	122	-19
Ground Nuts* (1.2)	-	-	-	-37	-4	-34	-23	-26	+8	-	-	-
Sisal (0.1)	-65	-44	-36	-26	-26	0	+78	+1	+81	-53	-31	-4

* Large percentage changes due to small initial values are excluded from the table.

(1) For notes see Table 3A.

TABLE 3C.

TANGANYIKA: PERCENTAGE CHANGES IN VALUE, QUANTITY AND PRICE OF AGRICULTURAL EXPORTS 1949 - 63(1).

	1949/50 - 1954.			1954 - 1958.			1958 - 1962/63			1949/50 - 1962/63		
	V.	Q.	P.	V.	Q.	P.	V.	Q.	P.	V.	Q.	P.
Sisal (29.0)	-5	+33	-30	-5	+19	-20	+85	+9	+72	+67	+74	-4
Cotton (14.9)	+92	+33	+40	+116	+164	-19	+25	+26	+0	+417	+344	+14
Ar. Coffee (12.3)	+397	+89	+168	-22	+9	-28	+2	+27	-23	+282	+163	+49
Meat * (4.1)	-	-	-	+10	-4	+15	+135	+109	+16	+4176	+433	+226
Cashew Nuts (4.0)	+290	+227	+28	+96	+92	+1	+101	+62	+27	+1427	+918	+64
Hides & Skins (3.3)	+53	+32	+18	-22	-24	+3	+35	+58	-14	+58	+48	+10
Tea * (2.6)	-	-	-	+25	+35	-7	+133	+51	+55	+1878	+721	+135
Ground Nuts * (1.1.)	-	-	-	+328	+396	-15	-25	-27	+2	+2048	+1767	+11
Robusta Coffee (1.0)	+178	+25	+126	-39	-17	-22	-33	+1	-34	+13	+5	+8
Wattle * (0.7)	-	-	-	-	-	-	-	-	-	-	-	-
Maize * (0.5)	-	-	-	-	-	-	-87.5	-91.5	+32	-	-	-
Pyrethrum (0.2)	0	13	-14	+55	+61	-5	-	-	-	-	-	-

* Large percentage change due to small initial values are excluded from the table.

(1) For notes see Table 3A.

TABLE 3D:- EAST AFRICA: RELATIONSHIP BETWEEN PRICE AND QUANTITY CHANGES FOR INDIVIDUAL COMMODITIES 1949/50 - 1962/63.

Commodity	Price Change			Quantity Change		
	High	Med.	Low	High	Med.	Low
Cotton			(K,U),T	T	K	(U)
Sisal			(K,U,T)		K,T	(U)
Arabica Coffee		T	K,(U)	K,U	T	
Tea	T	K,U		K,U,T		
Meat	T	K		K,T		
Hides & Skins			(K,U),T	U	T	K
Pyrethrum	K				K	
Cashew Nuts		T	K	K,T		
Ground Nuts			U,T	U,T		
Robusta Coffee			U,T	U		T
Wattle		K				(K)
Maize Unmilled			(K)	K		

Note: Brackets indicate negative quantities.

Table 4.

COTTON ACREAGES IN UGANDA 1948-62.

Thousand Acres.

Year	Total all Uganda	Buganda
1948	1,559.9	476.7
1949	1,628.5	527.9
1950	1,490.7	508.1
51	1,514.2	416.5
52	1,472.6	341.7
53	1,611.2	398.1
54	1,738.8	431.9
55	1,585.5	373.6
56	1,568.5	346.0
57	1,617.0	348.3
58	2,014.0	384.0
59	1,564.7	325.2
60	1,516.0	250.2
61	2,072.1	458.9
62	1,803.5	277.9

Source. Annual Reports of Agricultural Department.

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