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THE DEVELOPMENT MECHANISMS OF GROUNDNUT  
CULTIVATION 1885 - 1970

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THE DEVELOPMENT MECHANISMS OF GROUNDNUT  
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The economic development of Senegal under the colonial administration came several decades ahead of that of the other French West African territories. We already know that the remarkable expansion of groundnut cultivation was at the root of this development. Large scale production of groundnuts started in the areas served by railroads since 1885 (the 1884-85 crop already produced 45,000 tons of unshelled groundnuts). This increased to over 200,000 tons in the good years preceding 1914 and between the two world wars, new areas were put under cultivation, namely that of the Sine Saloum resulting into a record crop of 600,000 tons in 1936-37. From 1950 onwards, cultivation was extended to the Casamance and Eastern Senegal giving the record crop of over one million tons in 1965-66. The growth curve for the years 1885 to 1914, after adjustment, shows an annual growth rate of 8.8% which, for the years 1918 to 1940, was 2.7%. There was no change until 1950, when a very high growth rate (7.7%) was recorded for the ensuing decade, falling to 4% in the 1960-69 decade. This growth, as we already know, not only appeared to have stopped a few years ago, but also shows a tendency to fall, a fact revealed in the reduction of the area under cultivation. Such a decrease is happening for the first time in the country's history, with the exception of the war years.

Are producers giving up groundnut cultivation because of the decrease in their real purchasing power? This fall in real purchasing power is due partly to the deterioration in the terms of trade on the world market in recent years. This is made even worse for the groundnut producer by the increase in the prices of imported goods, due to the rise in import duties while, on the other hand, the purchase price in Dakar for a kilogramme of groundnut fixed at 22.75 francs between 1959 and 1965, has been gradually reduced until it reached 18 francs last year. How far is this deterioration in the rural income connected with the problem of marketing organization,

and to what extent does "collective ownership" of the latter account for the decline in production ?

Anfré V. HAEVERBEKE was quite right when he said that "the initial increase in production was based on the utilization of surplus production capacity". The traditional farmer was faced with a situation of "forced leisure". His ability to work, the land available and the agricultural techniques at his disposal would in fact have enabled him to produce more than he did. Once he had produced enough food to satisfy his needs, he had no reason to produce more. The development of a transport and marketing infrastructure in the colonial era provided a potential outlet for the farmer's produce, and thus brought about this initial growth without a decrease in food production.

This type of growth could only be achieved as long as land was available. But, according to calculations made, the full employment of one "unit of labour" requires an area of land of 3.75 hectares in the northern part of the groundnut growing area, 2 hectares in the Central part and 1.66 hectares in the Serère area, allowance being made for the decreasing average yields due to lower rainfall as one moves southwards. In traditional farming, these yields would amount to 900 kg/hectare in the South, 700 in the Central area and 500 in the North. Assuming 100 inhabitants to be equivalent to 80 "units of labour" and one square kilometre to provide 80 hectares of land for cultivation (account taken of the follow-years necessary in traditional farming), it does mean that the maximum rural population density that the country could support in traditional farming is 27 people per square kilometre in the North, 50 in the central area and 50 in the Serere area. These saturation points were reached in the North between 1900 and 1910; in the central area, between 1920 and 1930 and in the Serere area between 1930 and 1940.

The opening up of new areas relieved the bottleneck caused by land shortage. In the new areas opened up in the hinterland of the Saloum region between the two world wars, labour was scarce and workers were

recruited seasonally to cope with this situation. The annual figures for this seasonal labour were 60,000 between 1935 and 1940, 40,000 between 1949 and 1958, falling to the low level of 11,000 between 1959 and 1962. This type of labour disappeared almost completely when the permanent local population of these new lands reached a higher level. This labour contributed 8% of the groundnut output of Senegal between 1935 and 1940 and 6% between 1949 and 1958.

Substituting the production of groundnut for that of millet is another means of ensuring the full use of the factors of production. If we take into consideration the ratio of the average yield per hectare of groundnuts to that of millet, which is 1.85 (850 kg/hectare for groundnuts and 460 for millet), and the ratio of the amount of labour the farmer should provide in order to cultivate 1 hectare of groundnuts to that of millet which is 1.28 (480 working hours for the groundnuts and 375 for the millet), the substitution of groundnuts for millet is worthwhile if the ratio of the price per kilogramme of millet (or a cereal substitute) to the price per kilogramme of groundnuts is below 1.45. In other words, if the farmer is paid 18 francs per kilogramme of groundnuts for instance, he may be tempted to substitute this crop for millet if the rice sold to him (an equal weight of rice and millet having the same nutritive value 3,600 calories to the kilogramme) costs less than 26 francs. If the farmer should pay a higher price for his rice (at present the price is 45 francs) it is quite rational for him to give up this substitution, that is, to give priority to the satisfaction of his food requirements.

Very little is known about the growth rate of millet and sorghum production. Between 1950 and 1960 however, it appeared that production remained constant at around 320,000 tons (in an average year) resulting at best into a yearly growth rate of 1%, that is, a rate below that of the population. It would therefore seem that there had actually been a substitution of groundnuts for millet during this decade. This substitution did not seem to have occurred on a large scale before the second world war,

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the growth in millet production being apparently the same as the growth of the rural population. On the other hand, if the figures available are to be believed, the growth rate of millet production would have been 8% a year on average, between 1960 and 1968. This certainly accounts for the return to food production, clearly noticeable these last few years.

Improvement in yields became necessary as population densities reached their highest levels. Until 1950, farming techniques remained practically the same. The effort made since then, consisted in reducing the labour force by making use of animals and by raising the yield per hectare through a more extensive use of better quality seeds and of fertilizers. Theoretically, the correct use of the sowing-machine and the animal drawn plough enables the same labour force to increase the amount of land cultivated from 1 to 1.5 hectares. These implements were widely used during the last ten years, and the same applies to selected seeds. With the rational use of fertilizers which has increased from 21,000 tons in 1962 to 48,000 tons in 1967, it would be possible to increase the average yield per hectare by 50%. Should land be available, the Senegalese farmer could increase the area of his farm from 3 to 4.5 hectares while the annual expenses resulting from the modernization of farming methods would be 18,000 francs if he extends his farm and 13,000 if he cannot do so. From this, it follows that, if a kilogramme of groundnuts sells at 18 francs, modernization is a really attractive proposition to farmers only if lands are available in areas of adequate rainfall (Central and Southern regions) as shown by the following table reproduced from VANHAEVERBEKE:

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	Yield per hectare (kg.)		Gross income (000 fr)			Expenditure (000 fr)	
	Traditional farming	Modernized farming	Assumption I	Assumption II	Assumption III	Assumption II	Assumption III
Northern region	500	750	28	61	40	18	13
Central region	700	1,050	38	85	56	18	13
Southern region	900	1,350	49	110	72	18	13

Assumption I: Traditional farming - a farm of 3 hectares

Assumption II: Modernized farming - (optimal agricultural programme) - a farm of 4.5 hectares

Assumption III: Modernized farming - a farm of 3 hectares.

The benefit of modernization is measured by the difference between the increase in income (in relation to that accruing to traditional farming) and the expenditure. This benefit which is not always obtained, varies between 13 and 88% of the income from traditional farming, as the case may be

Profits as a percentage of traditional income:

	Assumption II	Assumption III
Northern Region	53%	loss
Central Region	76%	13%
Southern Region	88%	20%

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On the other hand, it is worth noting that a change from traditional to modern farming requires an increase in the man-hours worked, and this would be at least 35% for a farm of 3 hectares and 50% if it covers 4.5 hectares (weeding and spreading of fertilizers, upkeep of animals etc.). Owing to the decrease in the marginal productivity of labour in changing from the extensive methods to the relatively more intensive methods of modern farming, the real wage per day in the northern area falls in the case where an extension of the farm is not possible (due to the rural population pressure), and remains practically unchanged even if this extension is possible. In the central and southern areas, modernization, in the best possible cases, brings about an improvement of only 20% to 25% in the daily wage rate.

Economic incentives to adopt modern methods are, therefore, relatively mild. Modernization, however, became essential once the objective was to expand production of the country, that is, once it was affirmed that the "development" of Senegal should be based on groundnut production. The results of this modernization are therefore debatable. In a well watered and sparsely populated region, that is in the newly cultivated regions, mechanization has unquestionably brought about an increase in per capita output (and even a modest increase in wages). However, in the densely populated area, this increase in productivity has either caused the fallow system of cultivation to be ignored (and has thus compromised the future) or else has released surplus labour and caused a swelling in the ranks of the urban unemployed. Besides, as we shall see later, it has constituted a powerful force of social change towards a concentration of farms, in the hands of big landowners.

In fact, the decisive factor in the extension of groundnut cultivation has been the development and the improvement of the transport system. Sea freight charges which, between 1890 and 1900, amounted to 11% of the CIF value of the groundnuts reaching a European port, has been gradually brought down to 5% in 1927-28 and to 3.5% in 1958-59. The real cost of inland transport has also been considerably reduced (since 1925), by substituting lorries in the place of pack animals for the transport of the

groundnuts from the farms to the marketing centre (this cost was reduced by more than half between 1925 and 1935: from 20% to 9% of the value of the groundnuts at the marketing centre for an average distance of 20 kilometres). Cost were further reduced by the constant improvement of the road network and the better servicing of the lorries (reduction of the real cost by 80% between 1935 and 1965), and finally, by improving the railway lines (reduction in the real cost of rail transport by 45% between 1900 and 1962). Expressed in the CIF value of the exported product - European port, the real costs of inland transport have been reduced, between 1890 and 1965, by 60 to 80%, depending on the areas of production.

Inland transport and sea freight charges (as a percentage of the CIF value of the exported product - European port):

	1890-1900	1927-28	1955	1965
Area of production				
- near the railway station	16	10	6.5	6.5
- at 20 kilometres from the railway station	35	25	10.5	7.5
- at 100 kilometres from the railway station	56	35	13.5	10.5

Under these conditions groundnut cultivation, which could hardly be carried out in areas not linked by railway in the nineteenth century, has been practically extended to all parts of the country, even the remote ones.

UNBALANCED TRADE AND THE DETERIORATION IN THE SENEGALESE FARMER'S WAGE

The Senegalese farmer's effort to satisfy the requirements of the "world market" has been very poorly rewarded by the latter. The price of groundnuts expressed in constant value did not deteriorate in a clear and consistent way as it is sometimes rather hastily said. This real price has



been relatively stable between 1885 and 1914, allowances made for the normal fluctuations in the world economic conditions.

There was a heavy depression between 1925 and 1940, followed by a strict control of prices until 1950, corresponding to a very low level of the terms of trade (ranging between 50 and 66% of what they were in the year between 1880 and 1938. The guaranteed price system instituted in 1952 and maintained until recently, resulted in France paying, from 1952 to 1965, an "excess price" in relation to world prices, this amounting to 4.2 billions CFA francs a year on average. However, this amount was partially counter-balanced by an "excess price" paid by Senegal on its imports from France, estimated at 2.2 billions a year on average. This system of relatively fixed nominal prices paid to the farmer (fixed at 21 francs in 1953, increased to 21.70 in 1955, to 22.75 in 1959 and reduced to 18.40 in 1967) certainly did not prevent a marked deterioration in the terms of trade during the last decade, since prices of Senegalese imports increased at the same rate as French prices did. But we started with world prices in the fifties, which were 30% to 50% higher than those of 1938. This deterioration in the terms of trade was about 20% between 1957 and 1966 and will probably worsen when the European Economic Community (EEC) decides to bring its prices in line with "world prices". However, the tendency for the terms of trade to get worse in recent years was probably concealed by the difficulties which Nigeria, Senegal's major rival on the world market, had to face during the civil war which ruined her. Therefore, the deterioration in the commodity terms of trade was only 20% between 1880 and 1968 (the trend showing a slight decrease of 0.2% per annum).

But if the relative price of groundnuts has been roughly stable during the 90 years this production has been going on, there has been a consistently strong deterioration in the double factorial terms of trade (commodity terms of trade x the labour productivity index in Senegal/ the labour productivity index in France) which measure the changes in the amount of labour used in the production of an "imported basket" of goods in exchange for the variable quantity of groundnuts obtained with a constant amount of Senegalese labour.

While in France, labour productivity increased regularly and considerably, in Senegal, the only positive achievement in groundnut production up to 1950, was in the field of transport. However, later on, there was a slight improvement in the labour productivity of the groundnut farmer. According to the calculations of VANHAEVERBEKE, the double factorial terms of trade for Senegal ("the real wage rate obtaining in the rural area is used as the basis") - base year 1935 = 100 - deteriorated at the very high rate of 4.2% a year on average between 1880 and 1968, the index falling from 320 in 1911, to 186 in 1929 and 53 in 1957. This deterioration shows an ever-increasing imbalance in trade, the latter proving detrimental to the Senegalese farmer who hardly received, in terms of the value of the commodities exchanged, one seventh of what he used to receive less than a century ago. Without this ever-increasing imbalance in trade, that is, without the constant devaluation of the Senegalese labour, the commodity terms of trade of Senegal should have improved considerably, and the groundnut price paid to the producer (in terms of real purchasing power) ought to be about six times higher than what it is at present. Although this result may seem surprising, it is not at all strange. If the unshelled groundnuts were bought from the farmer at 100 francs (instead of 17 francs) and delivered to the oil producers at 105 francs (transport and marketing costs being 4.25 francs) instead of 32 francs, the price of groundnut oil would increase two and a half times, the groundnuts representing 65% of the price of the oil and other expenses (wages gross profits etc.) - remaining unchanged at 35% of this price. This readjustment would simply bring the price of groundnut oil in line with that of olive oil and walnut oil. Are there, in the comparative intrinsic value of these different table oils any reasons to justify the present differences in prices? That is what economic "theory" attempts to make us believe, the argument being purely a tautological one, since consumers "agree" to pay for these differences in prices, it is because the "value" of these commodities differ. Of course, it is not always added that the French consumer in the nineteenth century used

walnut oil and that he was persuaded to use groundnut oil (since this could be obtained cheaply in Africa where farmers were made to work at a much lower wage rate) by being told that there was nothing "better" than groundnut oil. Today, he is being made to believe, in the same manner, that olive oil is much better. In fact, olive oil sells dearer because the European farmer has to be paid a more satisfactory wage than the African producer.

We only have to make a rough estimate of the volume of Senegalese farmers' income transferred to France as a result of this deterioration, in order to realize the extent to which the "world market mechanism" can in fact, be regarded as an instrument of robbery. For, if the total output of groundnuts has a present day value of about 15 billions CFA Francs to the producer, in 90 years, Senegal will have transferred about 1,800 billions CFA francs at current value!! This represents the difference between the amount he was paid and that he should have been paid if the commodity terms of trade had altered in such a way as to remunerate the comparative increase in labour productivity (graph and calculation attached). This very large amount represents an average of 20 billions a year at current value spread over the given period, for a population which, in the middle of that period, hardly exceeded 2 million. This gives a figure of 10,000 CFA Francs at current value per Senegalese. This astronomical sum of 1,800 billions CFA Francs forbids any conclusion other than the following: groundnut cultivation can never contribute to the development of Senegal. It has rather brought about her spoliation, leaving her in a state of under development.

TRANSFORMATION OF THE SOCIAL STRUCTURE AND  
NATIONALIZATION OF COMMERCIAL ENTERPRISES.

The constant deterioration in the real wage of the Senegalese farmer has delayed the establishment of real capitalist agricultural enterprises. This was so, because the minimum wage paid to workers in the agricultural sector absorbed, under the conditions of deterioration in the relative price of groundnuts, all the revenue which could be derived from modernization. This obviously removed the profitability of capital investment in agriculture.

In this respect, it is often claimed that the development of modern structures in agriculture have been made impossible by too high wages. It is a fact that the development of a proletariat class has been hindered by the presence of strong social structures which, until the present time, has maintained the right for every village-member, even for those who have left their village, to cultivate a plot of land. Aware of the possibility of returning to the village, the African peasant has been better able to resist the threat of unemployment than his fellow worker in other regions of the Third World. Because of the solid traditional structures, the workers of Black Africa have largely escaped the starvation wages common in the Arab, Asian and Latin American world. This is certainly not "a bad thing" for Africa. On the contrary, it has worked in its favour. Without this "limit" imposed on capital domination, conditions would have been the same here as elsewhere in the Third World. Following the deterioration in the real earnings of exports, wages would have been reduced to a level well below subsistence rate, in other words, wages would have been at starvation level.

The road being barred to a capitalistic form of development, it is not surprising that the new structures of social organization which accompanied the development of the groundnut industry have been of the "feudal" type. The taxable surplus being small, the only possible distinct form

of social organization is one that would ensure the spreading of the tax over a large rural population. The organization of the Marabout brotherhoods fulfils this condition. Despite the widespread nature of this type of social organization, a belated and restricted group of small capitalist land-owners has appeared. Modernization has followed in this direction.

The facts have refuted the validity of the "ideal" of equal progress throughout the rural economy, a naive feature of the common ideology on which rural development programmes have been based in Senegal, as elsewhere in Africa, particularly in French-speaking Africa. Here, as elsewhere, real progress has been followed by distortions and has been able to make a headway only through the development of agrarian capitalism. In Senegal, this capitalism appears to have only superficially contributed to the inequalities in the actual ownership of land and in the development of a proletariat class. This pattern, which appears to be very similar to the agrarian capitalism which developed in the coastal forest zones (Ivory Coast, Ghana, Gulf of Benin, Cameroon and the Cong), is totally different from that which developed in the islamic dominated savannah lands stretching from Senegal to the Red Sea. In the groundnut growing area here in Senegal, there has been more concentration of wealth in the form of ownership of the means of production (tractors and other equipment) which the principal beneficiaries of modernization have accumulated and which they hire out to the less fortunate. How could the co-operatives, fulfilling their true function, have favoured this concentration of wealth? Who are the beneficiaries and how do modern forms of class distinction differ from traditional structures (castes, tribes, marabouts, etc....)? These are in fact, important questions.

Although little is known about the quantitative aspect of big land-ownership, there is no doubt that the latter exists. The agricultural survey of 1960-61<sup>1/</sup> although outdated, indicated the close relationship

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<sup>1/</sup> Studied, amongst others, by C. DIARASSOUBA (in his thesis) and by B. DELBARD ("Les dynamismes sociaux au Sénégal", ISEA, DAKAR 1966, pp.19 to 30 and 102 to 110).

between the concentration of farms (particularly on lands newly brought under cultivation) and equipment and cattle as a measure of wealth and the appearance of a semi-salaried labour force (25% of the labour force on farms of more than 15 hectares - which already cover about 14% of the lands under cultivation) since then, even within the co-operative system, the inequalities have greatly increased, since the co-operatives' objective is to promote the individual ownership of equipment by the farmers.

At the same time as co-operatives have been established the government has set about bringing marketing under its own control. There is no doubt that the establishment of the O.C.A. (Agricultural Marketing Bureau) answered the expectations of the farmers. The European-owned commercial enterprises had always, been the main instrument of colonial exploitation of the rural areas. This was effectively the channel through which was achieved the sizeable deterioration in the relative price of groundnuts. However, the establishment of a governmental organizations for the training of rural supervisory staff, the allocation of credits and the marketing of products brought about, at an early stage, an ambiguous situation. The objective of the organization was two-fold but contradictory, on the one hand, the liberation of the farmer from colonial exploitation, but on the other, the transfer to the Senegalese government, of that part of the surplus which had not been squeezed out by private commercial firms (colonial, to a very large extent), with a view to financing the over-all development of the country, in other words, make the rural areas pay for this development - at least partially.

However, government control of marketing was carried out too late in fact, when the latter had already lost most of its one-time substantial profitability. In fact, up to the fifties, the late development of French capitalism had resulted in the control and domination of the "colonies" by very ordinary groups of metropolitan capitalists, particularly by the old trading companies of Bordeaux and Marseille. This trading capital

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was allowed to make large profits in the colonies. But since the fifties, the modernization of France as well as the sharp competition between French capital and that of the other much more advanced members of the European Common Market (especially Germany) caused France to become the dominant financial centre. The old colonial companies have gradually lost their relatively large importance. Their profit margins have been cut down by the more dynamic sectors, a fact reflected in the recent deterioration in the terms of trade ("the adjustment to world prices"). In order to face up to this adjustment, attempts to raise productivity in groundnut production and transport, have been systematically undertaken since 1950 (through modernization and infrastructure development projects).

By the time it was nationalized, marketing had already lost its one-time profitability. This explains why the colonial companies allowed the business to be taken so easily out of their hands. The government has nevertheless freely taxed the rural areas through the public marketing organizations. At present, transport and marketing costs amount to 4.25 francs per kilogramme of unshelled groundnuts, whereas the price paid to the farmer has gradually been reduced from 20 to 17 francs. But groundnuts are sold to the oil producers at prices which vary according to "world trends" ranging from 26 to 32 francs in recent years (world market prices having been particularly "advantageous" during the last few years as a result of the difficulties experienced by Nigeria - main competitor to Senegal - due to the civil war in that country). The Groundnut Stabilization Fund has thus had a profit margin varying between 2 and 10 francs, depending on the year. From 1965-66 to 1968-69 the Fund thus accumulated 6.5 billion. This surplus, which has been used to support the public Treasury, is quite substantial, having made it possible to finance 26% of public investment (IBRD Report 1970, p.54-55).

However, the contradiction between the national objective and the conditions imposed by foreign capital domination (resulting in the reduction of the price of groundnuts) could only lead to an impossible situation.

Such a policy of taxation of the rural areas is always difficult to implement. It is even more so in Africa, fragmented as it is and most of all in Senegal: the "accident of history" with respect to the Gambia makes it impossible to carry out this policy if, in the Gambia, groundnuts are bought at a high price. In fact, such is the case: it is quite natural for the Senegalese farmer to refuse to sell his groundnut at 17 francs if he can sell it at 30 francs on the other side of the border, which is practically impossible to control. It is also quite natural that he should prefer to crush part of the groundnut himself, by using primitive methods, and to sell his oil directly to customers. This is more advantageous to the extent that the savings on the tax paid to the government more than compensate for the loss sustained by using primitive methods in contrast to industrial processing.

The oil producers, having based their policy on the emphasis placed on "groundnut specialization" in Senegal and having brought their crushing capacity up to a million tons, thus fall "victim" to this rational refusal of the Senegalese peasants. The result is the present crisis.

In addition, the nationalization of marketing has altered social relationships in the country-side. Under the "private enterprise" system of marketing, big landownership was fostered by intermediate African traders who acted as collectors on behalf of the colonial commercial houses, the Lebanese and the usurers, often working in co-operation with the village notables (marabouts, traditional chiefs, etc..). With the government taking over marketing, old relationships were replaced by new ones and the administrative body (for allocating credits, collecting the products, etc) took the place of private traders. The administrative body and the big land-owners both co-operated and competed with each other in sharing the surplus. Thus, it is not surprising that there is a general opposition to the government control of the marketing system. Having grown rich with the help of the administrative body, the big land-owners thought it was time to get rid of the yoke placed upon them by the latter. We have already witnessed such situations in the Third World, in Tunisia for example.

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But in such situations, "the return to private enterprise" runs the risk of being a "false solution". Either the re-established private enterprise can buy the groundnuts at a higher price than that paid by the government at present, in which case, the government loses the profit margin which now goes to the Treasury, or else the fit margin is retained (by special indirect taxation or any other method) and the farmers continue to "boycott" the sale of groundnuts.

#### THE REAL AGRICULTURAL SCOPE IN SENEGAL

Colonisation instilled the belief that the soil in Senegal was only suitable for the production of groundnuts. For a whole century, all attempts at development were centred almost entirely on groundnut production which was provided with an infrastructure that does not have its equal anywhere else in Tropical Africa. All agricultural research (the IRHO centre at Bambey is a clear example) has been concentrated on groundnut.

It is however quite clear that real agricultural scope in Senegal lies elsewhere. In fact, three regions in the country have real agricultural scope: the River valley area, the Niayes and the Lower and Central Casamance. If the billions invested in infrastructure for groundnut production had been used for the development of irrigation infrastructure in the three regions referred to, intensive cultivation and modern farms could have been developed on a very large scale in these regions: rice, sugar cane and cotton (using modern intensive cultivation methods, giving high yields) rich crops (vegetables and fruits and oil palm trees in the Casamance). With regard to the present groundnut growing area, the land is not especially suitable for groundnuts. It could be used instead for intensive modern stockbreeding (including the growing of fodder crop; beetroots etc., rotating these crops with the cultivation of millet and groundnuts, making use of the by-products such as oilcakes, and the waste products from flour-milling and fishing which, at present, are wastes).

In addition to these activities, there is the important sea-fishing industry for which the coasts of Senegal offer exceptionally great scope. There are certainly technical problems related to these, but they have so far never been seriously studied.

Nothing has been done with respect to these alternatives simply because the mother country did not envisage the development of the colony but rather used it for her own needs: that is, to provide the French consumer with extraordinarily cheap oil which involved underpaying the labour of the African farmer.

The mistake has been to carry on with specialization in groundnut production which continued even after independence. In fact, for 10 years the main effort has been in this direction. Foreign technical assistance has largely influenced this strategic choice and Senegal has failed to give due priority to the training of proper economists, capable of preparing a development strategy. To-day, the country is paying heavily for this short sightedness.

The result has been an extremely low real growth rate which the IBRD has estimated, for agriculture proper, at 1.5% per annum (at constant prices) between 1959 and 1969. In contrast to this, the rate of growth for stockbreeding and fishing was 6.1% per annum, and for all three together, agriculture, stockbreeding and fishing, the growth rate was 3.0% per annum (or 3.2% per annum at current prices). Taking into account the demographic growth the per capita growth rate turns out to be practically zero (0.5 to 0.8% a year)<sup>1/</sup> still, the Third Plan maintains groundnut production as a priority and proposes for 1974 the target 1,450,000 tons of groundnuts. Today this target appears, more than ever, impossible.

However, attempts have been made to develop other fields, giving promising results in spite of meagre resources. There have been attempts to follow-up traditional efforts in stockbreeding (water development for

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<sup>1/</sup> IBRD Survey on Senegal 1970 Table 9

cattle, vaccination, etc.) which have resulted in a rather high growth rate. In addition, the fishing industry has doubled its production (1959: 73,000 tons, 1967: 133,000 tons) without too much efforts. But the development of the regions in which irrigation is possible has remained inadequate in relation to the needs and the potentials. On the contrary "diversification" is taking rather different and debatable aspect, namely cotton-growing, introduced in Senegal in 1963 and yielding about 10,000 tons in 1969. But this is the kind of crop that can be compared to groundnut in that it is "poor", its price depending on the "world market" demand, and its prospects falling (competition from synthetic textiles, etc.). Countries "specializing" in this crop (Tchad, C.A.R., etc.) today have much the same problems as Senegal with her groundnuts.

Stagnation in agriculture, which has been developed along lines unsuited to the natural resources of the country but in accordance with the needs of the metropolies and the "world market", has constituted the main drawback to industrialization and development of the whole country during the last 10 years.

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