

Ex 1

UNITED NATIONS
AFRICAN INSTITUTE FOR ECONOMIC
DEVELOPMENT AND PLANNING

2074

(15)

IDEP/DIR/2399

English
Original : French

30 NOV. 1971

UNDER-POPULATED AFRICA

by

Samir AMIN

Director, African Institute for Economic
Development and Planning

Paper prepared for the African Population
Conference, Accra, 9 - 18 December, 1971.

November, 1971

UNDER-POPULATED AFRICA

During the last twenty years, there has been an impressive volume of literature written on the relations between demography and development. The increasing use of refined techniques to "measure" these relations (quantified in terms of "cost-benefit" for example)^{1/}, just as the magic use of computers, does not necessarily make it automatically scientific in nature. On the contrary, as we shall try to show in this paper, the dominant theme of this literature is based on ideology and not on science; and this ideology corresponds to the requirements of a political plan of action which hinders the development of the "Third World", especially that of tropical Africa.

The dominant "neo-malthusian" theme may in fact be summed up in the following two propositions:

Firstly, our planet is experiencing an unprecedented demographic explosion. Projections for the next 30, 50 or more years, based on present rates of growth of the population. Show that we shall reach astronomical figures which make us dizzy to think about and suggest a danger of absolute overpopulation with respect to the environment (natural resources and land in particular). The exploitation of these resources will be carried out under conditions of diminishing returns which would thus require proportionally increasing investments in order to achieve a given rate of growth.

Secondly, a high population growth raises the proportion of the non-working population (the young) dependent on that proportion which is involved in production. This distortion lowers the society's capacity to accumulate and consequently slows down its potential economic growth. It places the developing countries in yet another "vicious circle of poverty".

The observed facts would appear to confirm these two propositions. Agricultural stagnation in a number of regions of the Third World or at least, the stagnation in per capita output in agriculture, limits

the possibilities of financing increasing industrialization. It leads to the paradox that the countries of the Third World - agricultural producers - are more and more unable to feed their populations, that the increasing import of food products required to feed their town populations reduces their capacity to import capital equipment. But this stagnation is very often due to a shortage of arable land or at least, to the high cost involved in extending such lands (irrigation, etc.) The rural exodus resulting from the overpopulation of certain regions leads to a very high growth rate of the urban population (sometimes higher than 7% per annum). Industrialization, however rapid, is unable to cope with such a growth, and this results in unemployment attaining alarming proportions. The cost of setting up a social infrastructure (investment and running costs with regard to education) which is very high under conditions of high population growth, reduces the society's capacity to "keep pace" with the population growth.

This argument leads to an obvious conclusion: a lowering of the population growth rate not only allows, the income per head to be raised for a given growth rate of the economy but it also makes it possible to raise the overall economic growth rate (since it enables resources to be allocated in such a way as to promote accumulation). This then is the basis for the world-wide campaign of birth control.

We intend here to show:

Firstly, that under any circumstances, such arguments are not valid for the Third World as a whole where the ratio of population of natural resources varies widely; that if we take into account - which is not done - the improvement which an absolute increase of the population can make to this ratio, the overall effect of a high population growth may be different. This is not only true - as it is obvious - for the whole of tropical Africa or Latin America, but also for many regions of Asia (including many parts of the Indian sub-continent).

Secondly, that stagnation in agriculture, slow industrial growth and the upward trend of unemployment in the Third World arise for reasons which have nothing to do with population growth; that the mechanisms behind the dependency of the Third World are at the root of its under-development, and that this under-development is seen in the increasing marginalization of its population (revealed by unemployment, under-employment, etc.) which gives the impression of relative over-population, this being the case whether population growth is high or low.

Africa is under-populated

Many regions of Africa had a larger population in the remote past than they have to-day.^{2/} Their depopulation as a result of the slave-trade has, in many cases, led to a regression in agricultural techniques and productivity. The plundering of Africa did not stop with the end to the slave-trade. For many decades, the devastating work of the slave-trade was continued through colonization. Forced labour (particularly portering in Central Africa, the construction of roads and railway lines, etc.), compulsory levies for military service, people confined within small "reservations" to be used as cheap labour in the form of emigrants (Southern Africa and Kenya in particular), all these have led to rural depopulation, depriving the villages of a good proportion of their labour force. Such factors have brought about a decline in food and health conditions and have sometimes led to real famines and promoted the expansion of serious endemic diseases such as sleeping sickness.^{3/}

Tables I and II show that everywhere in Africa^{4/}, there are considerable reserves of arable land which are not being cultivated. The very low density of the rural population constitutes a serious handicap in the attempt to increase agricultural productivity.

First of all, one could show that the cost of setting up an infrastructure for development under such conditions is so high that the reduction of this cost per capita through an increase in the population density would be larger than the additional cost (education in particular) incurred through the high population growth necessary to achieve a

higher population density. This type of calculations which must be done for specific cases has never been popular with the neo-malthusians who concentrate their attention on half the problem only!

In an annex, we give an example of a discounted "cost-benefit" calculation based on average data for Tropical Africa which show the bias introduced by the neo-malthusians who only take into account the cost of the dynamics of population growth.

This argument, which is deliberately confined to the narrow framework of a cost-benefit analysis, shows that the computation of the dynamic effects (cost of demographic growth) may be combined with the "static" effects (benefits from a larger population). The very erudite and sophisticated studies which are made to show ad nauseam the cost of rapid demographic growth always neglect to do so.

The argument in terms of cost-benefit is certainly not the most important element. Esler Boserup^{5/} has shown that population pressure has, in the course of history, been a favourable and decisive element in the intensification of agriculture, a condition of the increase in its productivity. Many a programme of "modernization" in Tropical Africa has failed because it ignored the fact that, under conditions of high population pressure on poor land, extensive cultivation with low productivity successfully resists the proposed changes. The forms of social organization clearly linked with this type of extensive agriculture thus constitute a decisive "Handicap".

We shall thus see that progress in agriculture is not handicapped by demographic pressure. The opposite is true. Regions of high density (the Ibo or Bamiliké regions for example) have an extraordinarily better development potential than the vast under-populated zones. In any case, we have shown that relatively higher population densities were necessary for the development of a cash crop economy despite its limitations and its externally orientated nature, making it impossible to increase domestic savings, the surplus arising being transferred to the dominating metropolis.^{6/} If such regions which were conducive to development

did not give the expected results, it was due to the global policy of peripheral capitalism which confined them to the role of suppliers of export products or as reserves of cheap labour for the "modern" plantation economy or for the towns. It is worth making a comparison with Japan here as regards the negative nature of an externally orientated economy. In Japan, the rice cultivation economy made remarkable progress which enabled it to feed a very large urban population because the whole economic policy which was self-centered contributed to this progress: the allocation of resources which favoured the intensification of food production for the domestic market, progress in agriculture being a necessary part of the overall policy of self-centred development. Accordingly, real efforts were made for scientific research in that field. In Africa, the externally orientated model of development deprived agriculture of these resources and turned it into a pool of labour. Consequently, agricultural research was exclusively directed towards export products while food production was systematically neglected.

All this is not true only with respect to Tropical Africa. The same applies to Latin America, to some regions of Western Asia, the southern part of the Indian sub-continent and South-East Asia (Thailand, Indonesia, excluding Java, etc.). There are only for a few regions of the Third World (the West Indies, the Nile Valley, the delta regions of Asia, Java) which are not under-populated in the sense in which we have defined it.

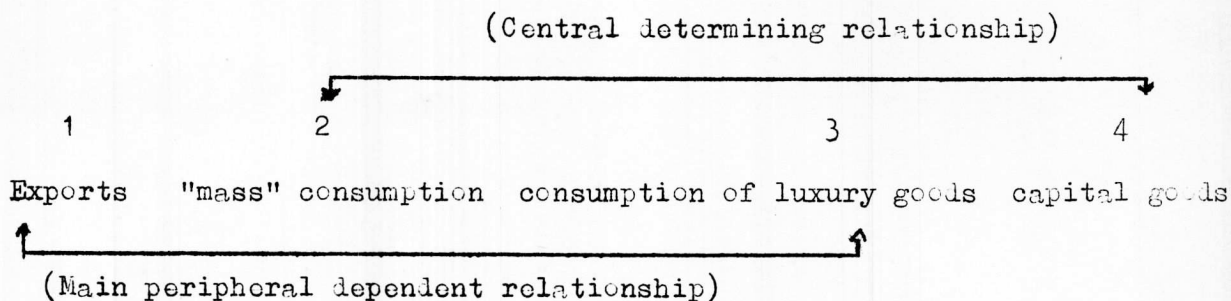
The neo-malthusian argument therefore does not stand up to the facts with regard to agriculture; but is it of any value in explaining urban unemployment? Here again, on the face of it one would think so. Tables III and IV a and b^{7/} show clearly the tendency for urban population to grow faster than paid employment. One can easily draw the conclusion that, if the growth of urban population could be slowed down, the increase in both employment (in relative terms) and urban income per capita would be higher. Such a reasoning completely ignores two main facts: the first is that industrialization at the centre had absorbed a volume of urban population increasing at very high rates (rates of 4% in the 19th century, were proportionately as costly as rates of 7% at the present time)

because this industrialization was self-centered; the second is that externally orientated development gives rise to a distortion in the allocation of resources which, coupled with technological dependence, is the root cause of increasing under-employment, whatever may be the demographic nature of urbanization.

Apparent "overpopulation" stems from the dependent model of development : marginalization.

There is a fundamental difference between the model of capital accumulation and economic and social development which characterizes a self-centered system and that of a peripheral system.^{8/} This difference explains the relative stagnation of the periphery (the impossibility to "catch up") and the rise in unemployment and under employment which gives the impression of "overpopulation" we shall show that the peripheral model of "development" necessarily brings out these characteristics independently of the changes in population.

The diagram below "sums up" the difference - from this point of view - between a self-centred system and a peripheral one.



The economic system is divided into 4 sectors which may be considered both from the point of view of production and from the point of view of distribution of the working population engaged in the above-mentioned productive activities.

The determining relationship in a self-centred system is that which links sector 2 (the production of "mass" consumption goods) with sector 4 (the production of capital goods intended for the production of sector 2). This determining relationship has been the characteristic feature of the historical development of capitalism at the centre of the system (in Europe, North America and Japan). Thus, it provides an abstract definition of the 'pure' capitalist mode of production. It could be shown that the development process of the USSR, like that of China, is equally based on this determining relationship, although in the case of China, the sequences of this process are original.

There is an objective (i.e. necessary) relation between the rate of surplus value and the level of development of the productive forces. The rate of surplus value is the main determinant of the pattern of the social distribution of income (its division between wages and surplus value which takes the form of profit), and consequently the pattern of demand (wages being the main source of demand for mass consumption goods, and profits being wholly or partly "saved" with a view to "investing" them). The level of development of the productive forces is shown in the social divisions of labour; the allocation of labour power, in suitable proportions, between sectors 2 and 4 (sectors 2 and 1 of Marx's reproduction model).

The objective relation in question is seen in the cyclical fluctuations of economic activity and unemployment. An increase in the rate of surplus value beyond its objectively necessary level leads to a depression due to insufficient effective demand. A reduction of this rate slows down economic growth and thus, creates the conditions for a labour market favourable to capital. An increase in the real remuneration of labour and therefore in home demand, the tendency towards full employment (which does not exclude, but on the contrary, implies a slight margin of permanent unemployment) and the cyclical fluctuations of unemployment reflect the functioning of this system.

The historically relative nature of the distinction between mass consumption goods and luxury goods can also be seen here very clearly. Strictly speaking, we should consider as "luxury" goods in this terminology the goods for which the demand originates

comes from the consumed fraction of profit. The demand resulting from wages increases with economic growth - the progress of the productive forces. Although in the early stage of the history of capitalism, this demand involved almost exclusively essential consumptions - food, textile goods and housing - today at a more advanced stage of development, it more and more involves durable consumer goods (motor cars, electric household appliances etc.). However, this historical sequence of "mass" products is decisively important in the understanding of the problem facing us, the structure of demand at the beginning of the system speeded up the agricultural revolution, by providing an outlet to foodstuffs for the home market (historically, this agricultural transportation took the form of agrarian capitalism). Besides this, we know the historical role played by the textile industry and urbanization (hence the saying "activity in the building trade is a sign of prosperity") in the accumulation process. On the other hand, durable consumer goods, produced with much capital and skilled manpower, appeared at a late stage when productivity in agriculture and in the industries producing non-durable goods had already gone through the crucial stages.

The model of capital accumulation and economic and social development at the periphery of the world system is not in any way related to the one we have examined above.

At the beginning and under an impulse from the centre, an export sector was created. This was to play a determining role in the creation and shaping of the market. We shall not get very far by repeating ad nauseam, the platitude that the products exported by the periphery are mineral or agricultural primary products. These are obviously products in which a given region of the periphery has a particular natural advantage (abundant supply of ore or tropical products). The underlying reason which rendered possible the creation of this export sector must be sought in the answer to the question

as to the conditions which ~~make~~ the establishment "profitable". There is no pressure for central national capital to emigrate as a result of insufficient possible outlets at the centres, it will however emigrate to the periphery if it can obtain a better return. The equalization of the rate of profit will redistribute the surplus arising from the higher return and capital will be exported as a means to fight the trend of a falling rate of profit. The reason for creating an export sector therefore lies in obtaining from the periphery, products which are the basic constituents of constant capital (raw materials) or of variable capital (food products) at production ~~costs~~ lower than those at the centre for similar products (or obviously, of substitutes in the case of specific products such as coffee or tea).

This is therefore the framework for the necessary theory of unequal exchange. The products exported by the periphery are important to the extent that - ceteris paribus, meaning here, with equal productivity - the return to labour can be less than what is at the centre. And it can be less to the extent that society will, by every means - economic and non-economic - be made subject to this new function: to provide cheap labour to the export sector.

Under these conditions, the domestic market born out of the development of the export sector will be limited and biased. The smallness of the internal market explains the fact that the periphery attracts only a limited amount of capital from the centre although it offers a ~~better~~ return. The contradiction between the consumption and production capacities is removed on the world scale (centre and periphery) by a widening of the market at the centre, the periphery - fully deserving its name - merely fulfilling a marginal, subservient and limited function. This syneic process leads to an increasing polarization of wealth at the centre.

However, once the export sector has expanded to a certain size, a domestic market makes its appearance. In comparison with the market emerging from the central process, this one is - (relatively) biased

against the demand for mass-consumption goods and (relatively) in favour of the demand for "luxury" goods. If all the capital invested in the export sector were foreign and if all the return on this capital were re-exported to the centre, the domestic market would, in fact, be confined to a demand for mass-consumption goods, and the lower the wage rate, the smaller the demand would be. But a part of this capital is locally owned. In addition, the methods used to ensure a low return to labour correspond with a strengthening of the various parasitic internal social classes which serve as conveyor-belts : latifundiaris in some places, Koulaks in others, comprador commercial bourgeoisie, state bureaucracy, etc. The internal market is thus mainly based on the demand for "luxury goods" from these social classes.

The periphery model of capital accumulation and economic and social development is therefore characterized by a specific inter-connexion which is expressed by the link between the export sector and luxury goods consumption. Industrialization through import substitution will thus start from "the end", i.e., the manufacture of products corresponding to the more advanced stages of development of the centre, in other words, consumer "durables." As we have already pointed out, such products are highly capital intensive and users of scarce resources (skilled labour, etc.). The result will necessarily be a distortion in the allocation of resources in favour of these products and to the disadvantage of sector "2". This sector will be systematically handicapped: it will not give rise to any "demand" for its products and will not attract any capital or labour to ensure its modernization. This also explains the stagnation in "subsistence agriculture" whose potential products attract little demand and does not acquire a share in the allocation of scarce

resources to enable any serious changes to be made. Any "development strategy" based on "profitability" (the structure of income distribution, the structures of relative prices and demand being what they are), necessarily leads to this type of systematic distortion. The few "industries" set up in this way and within this framework will not become development poles but will, on the contrary, increase the inequality within the system and impoverish the major part of the population (found in sector 2, in their capacity as "producers"), permitting at the same time a further integration of the minority within the world system.

From the "social" point of view, this model leads to a specific phenomenon: the marginalization of the masses. By this we mean a series of mechanism heterogeneous in nature, which impoverish the masses: proletarianization of small agricultural producers and craftsmen, rural semi-proletarianization, and impoverishment without proletarianization of peasants organized in village communities, urbanization and massive increase of urban unemployment and underemployment, etc. Unemployment in this case takes different forms from unemployment under the central model of development. Under-employment, in general, will tend to increase instead of being relatively limited and stable, cyclical variations apart. Unemployment and under-employment thus have a function different to that under the central model : the high level of unemployment ensures a minimum wage rate which is relatively rigid and frozen both in sectors 1 and 3; wage does not emerge both as a cost and an income which creates a demand, vital to the model, but on the contrary only as a cost, demand itself originating elsewhere : from abroad or out of the income of the privileged social classes.

The "externally propelled" nature of the type of development which perpetuates itself in spite of the increasing diversification of the economy, its industrialization, etc., is not the original sin, a deus ex machina foreign to the dependent peripheral model of capital accumulation, since it is a model of reproduction of its functional social and economic conditions. The marginalization of the masses is the very condition underlying the integration of the minority within the world system, the guarantee of increasing income for this minority, which ensures the adoption, by this minority, of "European" patterns of consumption. The extension of this pattern of consumption ensures the "profitability" of sector 3 and confirms the social, cultural, ideological and political integration of the privileged classes.

This essential phenomenon of "marginalization" which is quite independent of population movement, as shown at the level of appearances by the ever widening gap between economic dynamics and demographic dynamics. It thus gives the impression that the demographic explosion may be autonomous - and may be a handicap to development.

Some final remarks:

1. The complex social phenomena characterizing marginalization explain the failure of the birth control campaigns among the masses of the underdeveloped world. This failure is too easily attributed to the inadequacy of the means used, to the ignorance of the people involved and to the lack of responsibility of the administrators organizing these campaigns. The question of whether, at the micro

level of the families involved, the goal of reducing the number of children was justified has rarely been posed. But it is obvious that, within the context of "marginalization" - that of increasing under employment and impoverishment the large family constitutes the only social security. Therefore, there is no motivation for working-class families to accept the proposed birth control; on the contrary.

2 - The demographic variable is however neither a variable "of no importance", nor a variable to which "nothing can be done". It may well be that, under given specific conditions, an authentic development strategy will incorporate a population policy, either to slow it down, or to accelerate it, according to circumstances. But this policy has no chance of yielding results unless the micro motivations of families are consistent with the macro objectives of the nation. This presupposes that the strategy in question is a self-centred, independent development strategy. Indeed the pre-capitalistic autonomous societies of the past, with the means at their disposal, knew how to influence the demographic variable. And if today, China has mastered this variable, it is because other more fundamental problems for the definition of an autonomous development strategy have been solved. (9)

3 - All cost benefit analyses, even if correctly calculated (this is not generally the case), neglect the essential psycho-social aspect of population phenomena. The history of all the known civilizations reveals that every period of intense transformations and progress has been marked by a "population explosion"; no civilization which was stagnating from the point of view of population has

been progressive. The "challenge" of population, the invigorating clash of generations which it favours, the receptiveness to new ideas and the active search for new solutions it engenders, explain this correlation.

4 - The world-wide birth control campaign in the developing world expresses the fears of the "developed world" in the face of the danger of a radical challenge of the international order, by the peoples who are its first victims. In the extreme case the development of the spontaneous trends of the present system would require the reduction of the population of the periphery. The contemporary technical and scientific revolution, within the context of this system, in fact excludes the prospect of productive employment of the marginalized masses in the periphery. The failure of "voluntary" birth control methods must then lead to considering much more violent methods, ultimately coming close to genocide. Confined to the role of a reserve for rich tourists and, to the supplying of a few scores of million subordinate workers and servants which the central system will need, the "over-populated" periphery seems to be a threat to this project. The latter reveals at best, the "Europocentric" nature "of neo-malthusianism and no doubt also a latent or declared racialism".

5 - Last but not the least, we must avoid confusing birth control with its regulation (family planning) - Family planning, made possible by the conquests of modern science, can be an effective means of the liberation of the female half of mankind in all societies, developed as well as under-developed. It does not necessarily imply birth control in any way. It is in the obvious interest of its promoters to break unequivocally with the neo-malthusian trend.

Annex - A cost-benefit analysis concerning population

Two agricultural regions A and B of 100 Km² each have different densities: 10 per Km² in A (which has a population of 1000) and 30 in B (population 3,000).

The cost of a transport infrastructure to serve the region which is to be set up in year 0, is independent of the density: 200 Km of road which will cost one billion CFA francs. The relative advantage of B over A can thus be evaluated at X = 666 million, the marginal benefit of a community B three times more populated than A.

What would be the present value of the cost of education if the population increased from 1,000 to 3,000 in 35 years (assuming the population growth to be very rapid : 3% per year)? The community, when constant at the level of 1,000 inhabitants, needs 8 classrooms at an annual cost (investment and operating costs), of the order of 20 millions. Community B would need 24 classrooms (annual cost : 60 millions). The transition from the situation of A to that of B would thus involve, in present value terms, an additional (marginal) cost which is

$$Y = \frac{(20 \times 1.03) - 20}{1 + i} + \frac{(20 \times 1.03)^2 - 20}{(1 + i)^2} + \dots + \frac{(20 \times 1.03)^{35} - 20}{(1 + i)^{35}}$$

i being the discount rate and measuring the discounted educational cost of the population for the period of 35 years.

Y decreases when i increases. For $i = 1\%$, Y is roughly 666 million; thus the cost of population growth is equal to the benefit of the higher density X. But for $i = 5\%$, the cost Y is equal to only half of the benefit X; and for $i = 10\%$, Y is no more than one-third of X.

From this model, derived from the usual costs of infrastructure and education in tropical Africa, it can be seen that the cost of the dynamics of growth is generally much less than the ("static") benefit of a higher density.

TABLE 1

USE OF ARABLE LAND IN SOME AFRICAN COUNTRIES

unit = 1000 ha

C O U N T R Y	Total arable land (1) 1 = 2 + 3	Forests + Meadows + Pastures + Land which could be used (2)	Cultivated areas		Reserves (6) 6 = 1 - 3
			Total cultivated land (3) 3 = 4 + 5	Fallow land (5)	
<u>WEST AFRICA</u>					
Dahomey (1963)	11,262	9,716	1,546	596	10,232
Ivory Coast (1968)	32,246	23,387	8,859	1,859	30,387
Gambia (1967)	634	434	200	200	534
Ghana (1965)	16,519	13,684	2,835	2,835	13,684
Upper Volta (1964)	27,420	17,756	9,664	2,987	24,433
Liberia (1964)	11,137	7,287	3,850	3,850	7,287
Mali (1962)	50,000	37,800	12,200	3,000	47,000
Mauritania (1964)	5,154	4,890	264	264	4,990
Niger (1967)	39,620	28,120	11,500	3,000	36,620
Nigeria (1961)	79,390	57,595	21,795	21,795	64,850
Sierra Leone (1964)	7,507	3,510	3,997	385	7,122
Senegal (1967)	19,619	13,897	5,722	2,696	17,133
Togo (1966)	4,200	1,930	2,270	1,134	3,076

...

TABLE I

USE OF ARABLE LAND IN SOME AFRICAN COUNTRIES (Continued)

unit = 1000 ha

C O U N T R Y	Total arable land (1) 1 = 2 + 3	Forests + Meadows + Pastures + Land which could be used (2)	Cultivated areas			Reserves (6) 6 = 1 - 3
			Total cultivated land (3) 3 = 4 + 5	Land actually under crops (4)	Fallow land (5)	
<u>CENTRAL AFRICA</u>						
Burundi (1967)	1,541.3	734.8	806.5	806.5		734.8
Gabon (1962)	25,227	25,100	127	127		25,100
Dem.Rep.of Corgo (1962)	234,041	226,841	7,200	7,200		232,761
People's Rep.of Congo(1963)	33,300	32,270	1,030	1,030		32,270
Central African Rep.(1968)	62,298	56,398	5,900	2,900	3,000	61,698
Rwanda (1963)	2,634	1,639	995	995		2,402
Chad (1968)	128,900	121,400	7,500	2,500	5,000	126,400
<u>EASTERN AFRICA</u>						
Ethiopia (1965)	122,190	109,665	12,525	12,525		115,070
Kenya (1960)	6,882	5,212	1,670	1,670		5,212
Uganda (1967)	11,353	6,465	4,888			9,943

TABLE II

CULTIVATED AND NON-CULTIVATED ARABLE LANDS PER RURAL INHABITANT

COUNTRY	Population in 1968 (1000)		Non cultivated Arable land(1000 ha).	Cultivated land (1000 ha)	No of hectares of non-culti- vated arable land per rural inhabitant	No. of hectares of cultivated land per rural inhabitant
	Total	Rural				
<u>WEST AFRICA :</u>						
Dahomey	2.505	2.230	11.262	1.546	5.06	0.695
Ivory Coast	4.094	2.870	32.246	8.859	11.25	3.09
Ghana	8.404	5.883	16.519	2.835	2.8	0.483
Gambia	351	281	634	200	2.26	0.715
Upper Volta	5.137	4.874	27.420	9.664	5.61	2.03
Mali	4.839	4.301.2	50.000	12.200	11.6	2.83
Mauritania	1.093	984	5.154	264	5.25	0.268
Niger	3.619	3.366	39.620	11.500	11.8	4.05
Nigeria	61.676	47.491	79.390	21.795	1.45	0.46
Liberia	1.127	917	11.137	3.850	12.0	4.18
Sierra Leone	2.488	2.115	7.507	3.997	3.54	1.89
Senegal	3.734	2.614	19.619	5.722	7.56	2.19
Togo	1.760	1.480	4.200	2.270	2.28	1.23

.../=. .

TABLE II

CULTIVATED AND NON-CULTIVATED ARABLE LANDS PER RURAL INHABITANT (Contd.)

COUNTRY	Population in 1968 (1000)		Non cultivated Arable land (1000, ha)	Cultivated land (1000 ha)	No of hectares of non-culti- vated arable land per rural inhabitant	No of hectares of cultivated land per rural inhabitant
	Total	Rural				
<u>CENTRAL AFRICA</u>						1000 ha
Burundi	3,421	3,013	1,541,3	806,5	0,51	0,266
Dem. Rep. of Congo	16,648	14,150	234,041	7,200	16,53	0,508
Peoples Rep. of Congo	910	577	33,300	1,030	57,7	1,785
Rwanda	3,348	3,080	2,634	995	0,855	0,23
Central Af. Rep.	2,256	1,817	62,298	5,900	34,2	3,24
Chad	3,456	3,186	128,900	7,500	40,5	2,35
Gabon	475	403	25,227	127	62,5	0,32
<u>EASTERN AFRICA</u>						
Uganda	8,092	7,283	11,353	4,888	1,56	0,67
Ethiopia	23,821	20,360	122,190	12,525	6	0,615
Kenya	10,198	8,926	6,882	1,670	0,77	0,187

TABLE III
EVOLUTION OF THE NUMBER OF WAGE-EARNERS IN SOME AFRICAN
COUNTRIES DURING THE PAST 20 YEARS

COUNTRY	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969
Ivory Coast					169.8	181	197	204					247	
Upper Volta					27.8	27.4	26.3	22.8	32.8	26.2	22.9		23.5	
Ghana	267	277	292	319	333	349.8	356.2	374.0	386.9	392.7			402	
Gabon	37.3	41.5	38.1	41.3	42.8	40.0	42.0	44.0	45.4	45.4	47.4	51.8	55.2	
Kenya	596.7	614.4	593.9	596.9	622.2	589.4	581.2	533.3	589.6	594.0	577.5		627.2	
Mali						19.2	18.8	20.3					52.4	
Mauritania				1.9			11.6	8.09	9	7.7	8.3	9	11.8	
Niger	15.4	13.6		14.4		14.1								
Nigeria	415.9	439.0	440.8	433.7	499.9	422.8	480.2	441.5	561.5					
Uganda			243.0	239.5	244.5	236.1								
Senegal		79.53		88.9		83.3			82.97				153.2	

thousands

TABLE IVa

EVOLUTION OF THE NUMBER OF WAGE-EARNERS AND OF THE URBAN POPULATION

Unit: thousands

C O U N T R Y	1956		1960		1965		1968	
	No. of wage-earners	Urban population	No. of wage-earners	Urban population	No. of wage-earners	Urban population	No. of wage-earners	Urban population
Ivory Coast			169.8	245			247.5	1224
Upper Volta			27.8	134	26.2	271	23.5	280
Ghana	267	1,200	333	1,551	392.7	2,321	402	2521
Gabon	37	40	42	56.2	45.4	65	55.2	72
Kenya	596.7	612	622.2	638.8	594.0	947	627.2	1272
Mali			19.2	207	55	329	52.4	537.8
Mauritania			1.9	25.8	7.7	34.5	8.9	109
Nigeria	415.9		499.9	8,450				14185
Senegal			88.9	705			74.74	1120

TABLE IVb
EVOLUTION OF THE NUMBER OF WAGE-EARNERS AND OF THE URBAN POPULATION

Base years 1960 = 100

C O U N T R Y	1956		1960		1965		1968	
	Wage- earners	Urban population	Wage- earners	Urban population	Wage- earners	Urban population	Wage- earners	Urban population
Ivory Coast	-	-	100	100			145.5	500
Upper Volta			100	100	94.3	210	84.5	282
Ghana	80	77.5	100	100	117.9	149.5	129	163.5
Gabon	88	71.2	100	100	108	115.5	131	128
Kenya	96	97.5	100	100	95.5	147	100.8	199.8
Mali			100	100	286	159	272	260
Mauritania			100	100	405	134	467	423
Nigeria			100	100	174			
Senegal			100	100			84.2	160

NOTES

- (1) Example: Mac Namara's statement to the effect that the cost of a child in the Third World would be \$600 and that of avoiding it \$6, which has no scientific value but which reflects an obvious political programme.
- (2) The Congo kingdom had a population of 2 million in the 16th century (Sigbert Axelson, Culture Confrontation in the Lower Congo, Upsalla, 1970, p.91. By the time of the colonial conquest, after 3 centuries of the slave trade, the population of the region was less than one third of that figure. It has as yet barely caught up with the 16th century figure. The flourishing kingdom described by the Portuguese in the 16th century had given way to the poverty-stricken country which Stanley and Brazza visited. Many more examples could be given.
- (3) For a systematic table of all these devastating effects see my article "Sous-développement et dépendance en Afrique Noire, les origines historiques et les formes contemporaines" (Paper read at the symposium of the International Institute for Labour Studies, Dakar, Nov. 1971, mimeographed paper to be published) and the bibliography given in that article.
- (4) Tables compiled by Mamadou Barry, research fellow at IDEP.
- (5) Ester Boserup, The conditions of agricultural growth, London 1965.
- (6) Samir Amin, Le développement du capitalisme en Afrique Noire, in En partant du capital, Paris 1968.

- (7) Tables compiled by Mamadou Barry, research fellow at IDEP.
- (8) The model which follows is merely a brief summary of our work published under the title "L'Accumulation à l'échelle mondiale (Ifan-Anthropos, Paris 1970)". The reader can refer to that book for further details. See also our comprehensive paper, "The theoretical model of capital accumulation and of the economic and social development of the world of today" paper read at the symposium of the International Institute for Labour Studies, Dakar, Nov. 1971, to be published.
- (9) See my article, The theoretical framework of the problems of transition, paper read at the symposium of the International Institute for Labour Studies, Dakar, Nov. 1971, to be published.