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GROWTH AND EQUITY IN AGRICULTURAL DEVELOPMENT

PROCEEDINGS

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Edited by
Allen Maunder, Institute of Agricultural Economics,
University of Oxford, England
and
Kazushi Ohkawa, International Development Centre
of Japan, Tokyo

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Gower

DHARAM GHAI

*Stagnation and Inequality in African Agriculture*¹

INTRODUCTION

The purpose of this paper is to analyze agricultural development in sub-Saharan Africa since 1960 from the point of view of growth and distribution. It should be mentioned at the outset that an attempt of this sort is severely constrained by the availability of data and literature on the subject. There are relatively few works which attempt a quantitative, macro analysis of growth and distribution in the rural economy, either at the level of the country or group of countries. A recent World Bank publication has examined agricultural growth and policies in sub-Saharan Africa as part of a more general study but it has very little to say on distribution of benefits from growth (World Bank, 1981). A publication by the International Labour Office has sought to fill this gap through studies of rural poverty and agrarian policies in nine African countries but it does not contain a systematic analysis of the growth experience (Ghai and Radwan, 1982). This paper draws on these and other publications to sketch an overview of the salient features of growth and distribution in sub-Saharan agriculture.

THE GROWTH EXPERIENCE

The overall growth as well as the agricultural growth in sub-Saharan Africa over the past two decades has been lower than in other developing countries. Furthermore, there was a significant deceleration of growth in the 1970s as compared with the 1960s. In certain respects, the performance has been so poor that it is not too much of an exaggeration to speak of an agrarian crisis in the 1970s.

The average GDP growth rate came down from 3.9 in the 1960s to 2.9 in the 1970s; the decline being sharper – from 4.1 to 1.6 – if Nigeria is excluded from these figures. The performance of the agricultural sector was even poorer. The annual growth rate of agricultural production declined from 2.5 per cent in 1960–70 to 1.8 per cent in 1970–79 (World Bank, 1981). The seriousness of the situation may be illustrated by a few figures

relating to the 1970s. Between 1969–71 and 1977–79, out of 39 sub-Saharan countries, no less than thirty experienced declines in per caput agricultural production and twenty-seven experienced falls in per caput food production (as shown in Table 1). The decline is spread across a wide range of countries, covering low income as well as middle income and oil-exporting no less than oil-importing countries. There does not appear to be any correlation between performance in food and export crop production. There are countries like Swaziland, Malawi and Kenya which have done well in both food and non-food production. Likewise countries such as Guinea, Ghana, Togo, Gambia have performed poorly in both respects. On the other hand countries like Sudan and Benin while doing relatively well on food have fared poorly with respect to export crops. The opposite picture emerges in countries such as Chad, Mali and Congo.

The picture of agricultural stagnation in sub-Saharan Africa is confirmed by figures on the production of major crops, and on agricultural exports and imports (FAO, 1980 and World Bank, 1981). There was a marked decline in growth of output of most food crops between the 1960s and the 1970s: for instance, the rate of growth of maize fell from 5.2 to 1.3 per cent per annum, rice from 4.0 to 2.9, pulses from 3.3 to 1.1, roots and tubers from 2.0 to 1.8 and sugar from 6.3 to 2.5, while the production of wheat, groundnuts, palm kernels and seed cotton fell in absolute terms. There was a worsening of performance for all agricultural exports except for tobacco. What is even more striking is that there was an absolute decline in the volume of exports of no less than sixteen commodities, including such important crops as cocoa, coffee, maize, cotton, groundnuts, oil seed cake, bananas and rubber. Consequently the African share in exports from developing countries has fallen sharply for most commodities between 1961–63 and 1977–79, the major exceptions to this being tea, coffee and cotton. On the other hand, imports of many agricultural commodities grew extremely rapidly in the period since 1961, their total value rising by nearly six-fold between 1961–63 and 1977–79.

A fully satisfactory explanation of deteriorating agricultural performance would require a detailed analysis of the specific factors that have been operative at the level of an individual country – a task that cannot be undertaken here. Yet the experience has been sufficiently widespread to warrant the conclusion that there must have been some common elements at play. The major factors which appear to have been responsible for agricultural stagnation may be classified under three broad headings – a deterioration in the quality of the productive forces, disincentives to agriculture and certain exogenous factors. We discuss each of these in turn.

Deterioration in quality of land and agricultural labour force

For a number of reasons there has been a decline in the quality of the two main productive forces – the land and the labour force, resulting in a decline in yields and labour productivity. The traditional African agricultural system was characterized by low population/land ratios and shifting cultivation and livestock rearing. The period of cultivation and grazing

varied with the fertility of the soil but everywhere the fallowing of the land permitted the agricultural land and pastures to return to their original state. This system was disrupted by the onset of colonialism in two main ways: through the alienation of vast stretches of land for farms and plantations for European settlers and companies, primarily in Eastern and Southern African countries and the cultivation of cash, particularly perennial, crops by African peasant farmers. The process of commercialization of agriculture spread rapidly, gaining new momentum after independence, especially in countries in Eastern and Southern Africa where African agriculture and livestock had been held back during the colonial period by a variety of discriminatory policies. This process in turn led to increasing concentration of land ownership which further restricted the scope for shifting cultivation. The rapid growth in population has also been an important factor in undermining the traditional agricultural system.

These developments have resulted in declining soil fertility and yields through shortening or elimination of fallow periods, overgrazing by livestock and movement of the population to less fertile and more fragile areas. While most areas have been affected in varying degrees by this process, its most spectacular manifestation has been in the Sahelian countries and in some livestock-dominated economies like Lesotho and Botswana. The creeping desertification and the growing incidence of droughts have also been attributed to the collapse of the equilibrium between the size of population and livestock on the one hand and the 'carrying capacity' of the natural resources on the other (Van Apeldoorn, 1981 and Konczacki, 1978).

While there are few studies which rigorously establish the link between falling production, declining soil yields and changes in agricultural system, a wide variety of writers have attributed poor agricultural performance to an intensification of this process (Rene Dumont, 1978 and 1980, and Johnston, 1978). The decline between 1969-71 and 1977-79 in the yield of some important crops such as cocoa, coffee, maize, millet, wheat and seed cotton provides some evidence in favour of this thesis, although soil fertility is only one of the determinants of yields. On the other hand, it may be argued that the forces making for the deterioration of the natural resources have been underway for some time and it is not clear why its impact should be felt in such a dramatic manner only in the 1970s. While the choice of any year such as 1970 is obviously arbitrary, it would appear that the deterioration of natural resources and its impact on yields and production is a gradual and cumulative process, subject to offsetting or reinforcing influences. Some of these influences are discussed below but it may be speculated here that the reinforcing influences have tended to predominate in the 1970s.

In many regions the impact of the decline in the quality of land has been reinforced by a deterioration in the quality of the agricultural labour force. The latter is due principally to the continuing large migration flows from rural to urban areas within and across countries. The majority of the migrants are male within the 16 to 44 age-group and increasingly with

TABLE 1 *Growth of agriculture*

		Average annual growth rate of volume of production 1969-71 to 1977-79			Average annual growth rate of total production per caput 1969-71 to 1977-79		
		Food	Non-food	Total	Food	Non-food	Total
Low-income countries				0.9			-1.7
Low-income semi-arid				1.1			-1.2
1	Chad	1.0	2.0	1.1	-1.0	0.0	-0.9
2	Somalia	0.6	-0.8	0.6	-1.7	-3.1	-1.7
3	Mali	1.0	9.8	1.4	-1.6	7.2	-1.2
4	Upper Volta	2.0	7.2	2.1	0.4	5.6	0.5
5	Gambia	0.1	-	0.1	-2.9	-	-2.9
6	Niger	1.3	-7.8	1.3	-1.5	-10.6	-1.5
7	Mauritania	-1.3	-	-1.3	-4.0	-	-4.0
Low-income other				0.8			-1.8
8	Ethiopia	0.4	1.3	0.4	-1.7	-0.8	-1.7
9	Guinea-Bissau	1.4	0.0	1.4	-0.2	-1.6	-0.2
10	Burundi	2.7	1.8	2.6	0.7	-0.2	0.6
11	Malawi	3.1	8.6	4.0	0.3	5.8	1.2
12	Rwanda	3.9	4.7	3.9	1.1	1.9	1.1
13	Benin	2.5	-5.2	2.3	-0.4	-8.1	-0.6
14	Mozambique	-0.6	-4.7	-1.0	-3.1	-7.2	-3.5
15	Sierra Leone	1.4	4.9	1.7	-1.1	2.4	-0.8
16	Tanzania	1.9	-0.5	1.4	-1.5	-3.9	-2.0
17	Zaire	1.3	-0.6	1.2	-1.4	-3.3	-1.5
18	Guinea	0.5	-11.7	0.2	-2.4	-14.6	-2.7

19	Central African Republic	2.4	1.5	2.2	0.2	-0.7	0.0
20	Madagascar	1.8	0.7	1.7	-0.7	-1.8	-0.8
21	Uganda	1.7	-8.3	-0.5	-1.3	-11.3	-3.5
22	Lesotho	2.4	-7.0	1.4	0.1	-9.3	-0.9
23	Togo	-0.2	-4.2	-0.4	-2.6	-6.6	-2.8
24	Sudan	3.1	-3.9	1.8	0.5	-6.5	-0.8
Middle-income oil importers				2.2		-1.1	
25	Kenya	2.9	7.5	4.0	-0.5	4.1	0.6
26	Ghana	-0.1	-4.5	-0.1	-3.1	-7.5	-3.1
27	Senegal	1.0	11.3	1.1	-1.6	8.7	-1.5
28	Zimbabwe	2.6	3.8	2.9	-0.7	0.5	-0.4
29	Liberia	3.5	0.2	2.7	0.2	-3.1	-0.6
30	Zambia	3.0	-0.9	2.8	0.0	-3.9	-0.2
31	Cameroon	3.3	1.8	3.1	1.1	-0.4	0.9
32	Swaziland	3.7	14.6	4.6	1.2	12.1	2.1
33	Botswana	1.1	2.0	1.1	-1.1	-0.2	-1.1
34	Mauritius	1.9	3.9	1.9	0.6	2.6	0.6
35	Ivory Coast	4.6	1.8	3.8	-0.9	-3.7	-1.7
Middle-income oil exporters				1.1		-1.4	
36	Angola	0.2	-13.3	-3.3	-2.1	-15.6	-5.6
37	Congo	-0.1	1.9	-0.1	-2.6	-0.6	-2.6
38	Nigeria	1.7	-1.3	1.7	-0.8	-3.8	-0.8
39	Gabon	0.1	-13.3	0.1	-1.1	-14.5	-1.1
Sub-Saharan Africa				1.3		-1.4	

Source: *Accelerated Development in Sub-Saharan Africa – An Agenda for Action* (The World Bank, Washington DC, 1981).

TABLE 2 *Domestic terms of trade of export crops for selected countries*

	1971	1972	1973	1974	1975	1976	1977	1978	1979
	(1970 = 100 unless otherwise specified)								
Cameroon									
Barter terms of trade	98.2	90.5	85.2	81.2	74.5	73.4	77.5	88.2	—
Income terms of trade (cocoa, coffee, cotton)	89.8	96.9	84.0	81.8	81.1	66.4	67.2	91.7	—
Ghana									
Barter terms of trade	91.2	82.8	88.0	89.4	86.0	58.8	34.0	35.8	46.3
Income terms of trade (cocoa)	85.9	92.4	88.4	75.2	78.0	56.1	26.0	22.6	27.7
Ivory Coast									
Barter terms of trade	111.2	109.3	97.8	99.7	126.5	111.8	97.3	119.3	101.6
Income terms of trade (cocoa, coffee, cotton, palmoil)	113.4	134.1	111.6	134.3	171.5	178.0	144.3	170.6	131.2
Kenya									
Barter terms of trade	98.3	93.1	79.3	83.9	123.4	93.6	55.0	49.5	58.8
Income terms of trade (coffee, tea, pyrethrum, cotton, maize, wheat, sisal)	129.2	157.0	177.9	198.5	170.1	280.0	449.6	263.5	218.0
Malawi									
Barter terms of trade	105.9	129.1	123.0	100.1	94.3	115.4	119.0	116.7	—
Income terms of trade (tobacco, groundnuts, cotton, maize)	108.3	122.2	139.4	104.5	104.6	98.6	120.5	124.6	—
Mali									
Barter terms of trade	81.2	80.6	69.0	61.2	83.1	79.4	65.3	60.0	50.0
Income terms of trade (cotton, groundnuts)	99.2	98.8	76.8	55.7	94.1	135.8	123.5	90.1	76.4

Nigeria									
Barter terms of trade	-	-	96.5	119.2	125.2	95.9	119.1	93.0	109.0
Income terms of trade (cocoa, cotton, palm kernels)	-	-	75.0	102.5	104.6	79.4	80.0	43.6	58.1
Senegal									
Barter terms of trade	97.3	111.9	104.2	114.1	120.6	115.1	103.4	101.5	91.3
Income terms of trade (groundnuts, cotton)	77.3	146.1	81.4	84.5	141.1	204.2	148.7	72.2	104.7
Tanzania									
Barter terms of trade	96.9	95.3	88.5	76.0	63.5	90.7	110.0	79.5	67.4
Income terms of trade (coffee, tobacco, cashews, cotton)	101.8	102.8	96.3	78.8	68.8	84.5	102.5	73.7	62.7
Togo									
Barter terms of trade	98.5	92.8	88.5	80.0	79.2	76.2	68.4	80.6	90.1
Income terms of trade (cocoa, coffee, cotton)	110.5	92.8	64.1	57.2	57.0	62.0	49.4	48.8	57.8
Upper Volta									
Barter terms of trade	99.0	101.7	102.8	108.0	91.9	101.7	105.5	101.7	92.6
Income terms of trade (cotton, sesame)	106.9	130.7	110.0	140.2	181.6	214.0	156.0	229.5	245.8
Zambia (1971 = 100)									
Barter terms of trade	100.0	82.1	113.6	104.8	91.8	84.7	104.6	98.1	127.2
Income terms of trade (maize, groundnuts, tobacco)	100.0	142.6	97.9	126.1	125.6	169.6	133.1	92.9	90.4

Source: *Accelerated Development in Sub-Saharan Africa – An Agenda for Action* (The World Bank, Washington DC, 1981).

primary or secondary education (Amin, 1978, Böhning, 1981, and Gaude, 1982). This pattern of migration deprives the rural areas of young educated persons and results in a preponderance in the rural population of children, women and old persons. Since it is traditionally the men who play the main role in land clearance and maintenance of soil fertility, their absence in large numbers can be expected to have adverse effects on agricultural output in addition to the imposition of a greater work burden on women and the old people – in itself a contributory factor to lower productivity (Bukh, 1979). It can also be expected to have a negative impact on absorption of innovations and overall managerial efficiency since extension services are typically directed at men who retain responsibility for overall management of the farm. As with the deterioration of the quality of land, the adverse impact of the prolonged absence of male adults on agricultural production and yields is gradual and cumulative.

Disincentives to agriculture

As in many other developing countries, the real returns to farmers from investment of labour, capital and enterprise in agriculture have been reduced by a variety of factors. The effect has been to reinforce the impact of deteriorating natural resources in stimulating the flight from the land. Different techniques have been used in different countries to extract resources from the agricultural sector. Unfortunately there are few studies which have attempted to derive comprehensive estimates of net resource transfers from agriculture, but some partial evidence is available. Table 2 shows the domestic terms of trade for some export crops in selected countries. These terms are naturally affected by the world prices for these crops but they are also influenced by domestic policies in such areas as exchange rate, trade protection, taxation and so on. The table shows a fairly sharp decline in domestic barter terms of trade for selected export crops for most years for countries such as Cameroon, Ghana, Kenya, Mali, Tanzania and Togo. On the other hand, the terms generally held up well for Malawi, Ivory Coast, Senegal, Nigeria and Zambia. Even in some of these countries, however, the export crops were taxed quite heavily. Coffee and cocoa growers, as, for instance, in Ivory Coast, received only 68 and 56 per cent of export proceeds in 1971–75; these declined further to 36 and 38 respectively in 1976–80. Likewise in Malawi, the smallholders received 42 and 28 per cent of export proceeds for tobacco in 1971–75 and 1976–80 respectively. The receipts for cotton were 68 and 75 per cent over the two periods (World Bank, 1981).

These indices of taxation of export crops do not measure the further effective taxation 'levied' by overvalued exchange rates and inefficient marketing systems. There is little doubt that the situation in both these respects has deteriorated quite considerably in most African countries in the 1970s. These two factors also affect the returns from domestically marketed products. Although less information is available on 'effective taxation' of domestically marketed food crops, until recent years many African countries tended to fix producer prices at relatively low levels in

order to keep food prices low for urban consumers. However, relative food prices have risen quite sharply in recent years in a number of countries including Ghana and Nigeria.

With the deterioration of the overall economic situation and the intensification of foreign exchange shortages experienced by most African countries since the late 1970s, there is an increasing scarcity of basic consumer goods in the rural areas. In a situation like this, the terms of trade faced by farmers become irrelevant. In a growing number of African countries, the sheer unavailability of consumer goods in rural areas is exercising a strong disincentive effect on agricultural production.

The general economic difficulties have also affected the range and quality of support services for agriculture. In many countries there has been a deterioration in recent years in the quality and output of agricultural research stations and extension services. The supply of inputs like seeds, fertilizers and pesticides by public agencies has become increasingly less reliable. Above all, there is inadequate research effort to find solutions to the problems the African agricultural systems are confronted with and to generate a flow of appropriate innovations to enhance yields and labour productivity (Johnston, 1981). While the term 'collapse' is perhaps too strong a word, there can be little doubt of a serious rundown of agricultural support services and infrastructure in several African countries in recent years.

Some exogenous factors

Sub-Sahara Africa has suffered in the late 1960s and 1970s, perhaps more than other developing regions, from political instability, wars, and droughts. Just to mention some major upheavals and wars witnessed during this period; the civil war in Nigeria; the prolonged struggle for independence in Mozambique and Angola which ultimately resulted in the mass exodus of the settler community and drastic reorganization of their economies; the Ethiopian revolution, civil war and war with Somalia; the prolonged war for independence in Zimbabwe; war between Uganda and Tanzania; civil war in Chad; continuing war in Western Sahara; not to mention the repeated acts of sabotage waged by South Africa on Angola, Mozambique and Zimbabwe and coups in several countries. There can be little doubt of the strong negative effect exerted by these events on overall and agricultural development. Apart from the diversion of scarce resources for purchase of military supplies and maintenance of armies, there is massive disruption of production and dislocation of the population. A partial but tragic indicator of this turbulence is provided by the 5 million officially-estimated refugees in Africa in 1980.

Agricultural production has been further adversely affected by a series of droughts. The best known of these is the prolonged drought in the early 1970s which had such a devastating impact on the Sahelian countries (Van Apeldoorn, Konczacki, and Sen, 1981). In terms of numbers of people affected, the droughts in the late 1970s and early 1980s affecting a number of countries in Eastern and Central Africa have perhaps been even more serious.

Concluding remarks

Although presented separately, many of the factors noted above are interrelated and often mutually reinforcing; for instance, the decline in soil fertility by reducing yields and income may further stimulate migration, while the selective nature of migration intensifies land deterioration. The squeezing of agriculture both intensifies migration and reduces resources available to the farmer to restore soil fertility. Even the occurrence of droughts has been linked to a deteriorating environment.

Even if there were agreement that the factors listed above are primarily responsible for agricultural stagnation in Africa, it is not possible to assign weights to these different factors. The relative importance of different factors is likely to vary from one country to another and often over time within the same country. From the point of view of policy, it is obviously important to have more precise ideas on the contribution to agricultural stagnation made by different factors. In principle, it is easier and quicker to adjust policies to remove or lessen the disincentive to agricultural production than, for instance, to find lasting solutions to the problems engendered by a transition from shifting to settled agriculture. Very little has been said here on the impact of the world economy on agricultural development in Africa. While there continues to be disagreement about the role played by the movements in world commodity prices in explaining agricultural stagnation, few would dispute that the immense rise in the price of fuel, the combination of inflation and recession in the industrialized countries resulting in reduced demand and low prices for some important export crops have had strong negative effects on African agricultural development both directly and indirectly through reduced development expenditure attributable to foreign exchange scarcities.

PATTERNS AND PROCESSES OF DIFFERENTIATION

It is not possible to give precise estimates of the structure of and changes in rural income distribution over the period covered. There are few countries in sub-Sahara Africa which have reliable national household income or expenditure surveys at a given period, let alone comparable time series data. Nevertheless, it seems justified on the basis of the available quantitative and qualitative information to draw three broad conclusions regarding rural income distribution: there are considerable inequalities in rural income distribution, these inequalities have tended to widen over time, and in the 1970s, especially, large sections of the rural population have suffered declines in their incomes.

The quantitative evidence on overall and rural income distribution in a number of African countries has been assembled and analyzed elsewhere (Jain, 1975; Ghai, Lee and Radwan, 1979; and Ghai and Radwan, 1982). The Gini ratios for rural income distribution vary between 0.32 to 0.39 for Tanzania, Lesotho, Sierra Leone, Zambia and Sudan. This would make them comparable to the concentration in rural incomes in most Asian

countries. The rural inequalities in Kenya and Botswana with Gini ratios of 0.50 and 0.49 appear high by international standards. While no comparable figures are available for other countries, there is some evidence to indicate that in countries where commercial agriculture has penetrated more deeply such as Ghana, Ivory Coast, Nigeria and Senegal, the indices of inequality would be higher than in the first group of countries mentioned above (Ghai and Radwan, 1982; Dumont et al, 1981).

Some indirect evidence on rural income inequalities is contained in Table 3 which provides estimates of Gini coefficients for land distribution in a number of African countries. Bearing in mind the usual qualifications that apply to data of this nature and the fact that in some countries the coverage is confined to traditional or smallholdings alone, the inequalities in land distribution in African countries appear substantially greater than might be deduced from the popular notions of land abundance, customary land tenure system and family based subsistence cultivation. They lend support to the estimates of income inequalities presented earlier. On the whole the estimates of land concentration appear well below those for Latin America but not too dissimilar to those in Asia. The majority of the African countries have land concentration ratios between 0.37 and 0.48 which makes them comparable to Sri Lanka, South Korea and Thailand. The higher figures for Kenya, Botswana and Ghana are nearer to those found in Philippines, Pakistan, Bangladesh and India (Ghai, Lee, Radwan, 1978).

These inequalities have resulted from policies initiated during the colonial period and from rural development strategies pursued in the post-independence period. The mechanisms and processes generating inequalities and impoverishment during the colonial rule have been studied extensively. It is, therefore, necessary only to recall the main features of these processes. Development during the colonial period followed two broad patterns. In the settler dominated colonies in East, Central and Southern Africa, the basis of differentiation and impoverishment was laid by policies comprising land alienation for white farms and plantations, consequent overcrowding of African peasants and herdsmen in 'reserves', and creation of a wage-earning class through partial or complete dispossession of land. These policies were buttressed by a discriminatory pattern of public expenditure concentrating infrastructural development in areas of white settlement. The result of these policies was the creation of an affluent immigrant community surrounded by a mass of impoverished peasantry and agricultural workers, and sharp regional differentials in levels of development.

The other pattern of development, exemplified by West African colonies, consisted of peasant cultivation of export crops. The ecological factors dictated the choice of wet coastal forest zones for the production of these crops. The social and economic infrastructure was concentrated in these areas, thus laying the basis for sharp regional differentiation. The rapid expansion of cash crops in countries such as Ghana and Nigeria resulted in the creation of a relatively prosperous class of commercial farmers. It also led to a modification of the traditional land tenure system

creating a market in land and *de facto* individual ownership of land. The process of commercialization of peasant agriculture through cultivation of export crops spread through to other countries and was continued after independence. Cocoa and palm oil in Ghana; cocoa, palm oil and groundnuts in Nigeria; cocoa and coffee in Ivory Coast and groundnuts in Senegal and Gambia became the main cash crops. Even in the 'settler colonies', the policies were changed before independence to encourage peasant cash crop cultivation through settlement schemes and development projects. These policies were continued after independence and led to a sharp upsurge in smallholder production.

The cultivation of export crops was generally the first step in the differentiation process. Those who were fortunate enough to have land in the 'right' areas and were selected by the authorities as 'progressive' farmers experienced significant increases in incomes. This in turn provided the savings for further investment in land and expansion or diversification of production (Polly Hill, 1970). In many cases, trading or other non-farming activities provided the surplus for land acquisition (Clough, 1981). Earnings from jobs in the urban areas have been in some cases important sources of finance for purchase of land and livestock (Collier and Lal, 1980).

The state policies have greatly accelerated this process. Extension services, supply of credit, seeds, fertilizers, tools and other inputs have generally concentrated on the relatively more developed areas and the better-off farmers. In most countries the political, bureaucratic and business élites have used their positions in the state machinery to acquire farms or participate in subsidized agricultural development schemes.

These are some of the mechanisms which have led to the emergence of a class of relatively prosperous farmers variously called progressive, commercial or emergent. Some of the largest of them are urban-based absentee farmers. At the other end of the scale, a rapidly increasing number of households are confronted with pressures forcing down their meagre living standards. Land scarcity has been a problem in a number of countries or areas – Kenya, Malawi, Rwanda, Burundi, Zimbabwe, Lesotho, Swaziland, Mauritania and Niger, Southeastern Nigeria, Western Highlands of Cameroon, the Mossi plateau of Upper Volta and Senegal's northern Groundnut Basin. Pressure of population combined often with significant inequalities in land distribution is leading to the emergence of landlessness in some areas. More frequent is the existence of excessively small holdings forcing some members of the household to earn income through casual employment. The scarcity of land is also contributing to reduced yields and hence lower incomes through soil deterioration. It has also led to out-migration to the more arid zones as in Kenya where incomes are lower and more uncertain. For households already on the margin of subsistence with small cash incomes, a family misfortune or a drought can lead to irreversible loss of land or livestock. (Van Apeldoorn, 1981 and Sen, 1981). The rapid inflation combined with stagnant cash incomes and inflexible expenditure items have driven many into debt, sale of assets and penury. As already

noted, the majority of peasant households, particularly in less advantaged areas, have been largely bypassed by government programmes for agricultural development while not escaping taxation and the impact of inflation.

The processes described above have tended over time to widen rural inequalities in most countries. It is, however, difficult to determine the net impact on income distribution of the pattern of agricultural development in the 1970s. Within the context of a marked slowdown in agricultural growth, export crops have fared worse than food and in some countries, like Ghana and Nigeria, the barter terms of trade have moved strongly in favour of food producers. What is less disputable is that a great majority of the rural population in a large number of African countries must have suffered a decline in their real incomes in the 1970s. This conclusion follows from declines in agricultural production per rural inhabitant in at least 25 countries and from the impact on farmers' incomes of a variety of government policies reviewed in the last section.

In conclusion it should be stated that during the period under review, a number of countries including Guinea, Tanzania, Mozambique, Angola, and Ethiopia have attempted to achieve rural development through different institutional systems with the objective, *inter alia*, of controlling polarisation of incomes and wealth. With the exception of Tanzania, either the experience has been too recent or too little is known about the outcome for a useful assessment to be made in terms of growth and distribution. The Tanzanian experience has been analyzed quite extensively. It would seem that certain features of rural institutional framework in Tanzania have operated to check differentiation but the growth in agricultural output has been disappointing.

This paper has attempted to survey and analyze growth and distribution in African agriculture. Owing to lack of availability of data on trends in rural income distribution in the 1960s and 1970s, it has not been possible to relate changes in income distribution in a systematic way to patterns and rates of agricultural growth. Further analysis must await the availability of better data and should be conducted at the country level.

NOTES

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DISCUSSION OPENING – RUFUS O. ADEGBOYE

This paper has described some of the problems of inequality in African agriculture but it has made no suggestions for improvement of or solutions to the problems raised.

It is not very impressive to talk of 5 million refugees in Africa. If these people are Africans could they be called refugees in Africa?

It is agreed that in an attempt to promote certain state development measures there is likely to be some damage done to agricultural development. For example, the concentration of industries in large cities and the importation of food stuffs which are produced locally but not well distributed could easily cause the farmer to move to the city or produce only for his family.

Solutions may be found in the need to develop communication partnerships between city people and farmers, banks and farmers, government and farmers. Extension workers, politicians, loan officers, co-operative officers, development planners and so on need to know the farmers' problems very well before attempting to help them. Similarly such international organizations as the ILO, FAO, the World Bank, and others must encourage the carrying out of basic village-level research projects in order to help developing countries to build up a reliable data bank.

GENERAL DISCUSSION – RAPPORTEUR: E. A. SAXON

Considerable discussion centred around the role of multinational and national agribusiness in the context of growth and equity. Some speakers claimed that some of these tend to monopolize the supply of farm inputs and charge farmers prices much above world levels, while others may monopolize agricultural processing, extracting unreasonable profits. These activities raise problems of equity in developing countries that should be more fully explored in the context of the theme of this Conference.

A related issue is the plantation sector in which multinationals may also be involved, in some cases exerting undue influence on national governments. This may mean that investment policies are determined externally rather than by the country itself.

In reply, the speakers (Ranis and Ghai) said that this was an emotional subject and that there were both positive and negative aspects in the role of large corporations, for instance in East Asia they have contributed positively to growth and equity. In some countries large plantations have been nationalized and split up into small farms. Malawi is one of the few countries which invites investment in the plantation sector, leading to increases in employment and investment. While it is true that most of the profits have gone to better-off groups, expansion of the sector has yielded benefits overall.

A further query related to the conditions under which export promotion and import substitution become both feasible and effective. Professor Ranis said that most former colonial countries passed through an export orientation stage on the way to economic growth, but each case was different. Some East Asian countries concentrated on food, others on cash crops, with differing implications for development. Each country faced a difficult political decision as to when to shift from traditional to non-traditional exports. There is, for example, a large potential for South-South trade in manufactured goods, especially if some modifications are made in the goods produced.

One speaker commented that in all countries there were important differences in behaviour between small and large farms. Small farms are intent on maximizing food production and income in the short term and hence may fail to conserve resources, while large farms are better able to conserve resources. The source of growth can thus be undermined by the small farmer who cannot take the long-term view.

A specific query on Dr Ghai's paper was whether the Gini coefficients relating to income included non-agricultural income and how the Gini coefficients for land were estimated, seeing that there is a lot of fallowing in African agriculture. In reply Dr Ghai said that income data was from ILO and World Bank sources, and generally referred to income from agriculture alone. Land data related to holdings by the family at any one time, and did not include communal land. It was not clear what definition was used as regards cultivated and fallow land.

Participants in the discussion included Martin Upton, Sung-hoo Kim,

Frank Baffoe, M. G. Chandrakanth, H. Dequin, B.N. Verma and H.M.G. Herath.