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AGRICULTURAL RESTRUCTURING
IN
SOUTHERN AFRICA

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AGRICULTURAL ECONOMY OF ZAMBIA

A B Chilivumbo

Since the beginning of the 1970s many countries in Sub-Saharan Africa have experienced agricultural production failures, resulting in chronic food shortages. The quantity of food supply in some of these countries has fallen even further below subsistence requirements. As a result, millions of people in the region have become victims of hunger, malnutrition and famine. In some areas millions of people and livestock have perished, and several millions more still live under the cloud of an impending disaster. Further, most of these countries have recorded very slow economic growth rates and experienced reductions in per capita income. The Republic of Zambia is a classic case.

It is ironic that Zambia has tremendous potential for agricultural development, food production and the creation of employment in agriculture, and yet is not able to feed its people. Zambia also has an abundance of labour and land, and in recent years there has been an increase in the area under crop, extension services, capital investment and farmer support programmes. Despite all this, the country continues to have a disappointing record of agricultural production. What could be the reason? The objective of this paper is to provide some insight into the problem.

There are many factors that may be associated with the failing agricultural productivity and food shortages in Zambia. In this paper only a few salient factors are used as explanatory variables, such as colonial heritage, inappropriate policy and implementation, unfavourable political conditions in the region and rapid rate of urbanization. The remainder of the paper focuses on how these factors may have influenced the nature of agricultural development in Zambia.

GENERAL OVERVIEW: THE ROLE OF AGRICULTURE IN THE ZAMBIAN ECONOMY

Despite its potential, the contribution of agriculture in the Zambian economy has not been substantial. In 1985 agriculture contributed only 17,0 percent of the GDP, of which crop and livestock sector accounted for 15,1 percent. However, between 1970 and 1980 GDP generated by agriculture increased by 26 percent while the percentage contributed by the mining sector, the major foreign exchange earner, fell by 25 percent in constant 1977 prices (CSO, 1984:1). But between 1980 and 1985, GDP generated by agriculture declined due to drought. The contribution from mining fell by 37,0 percent in 1977 constant prices (CSO, 1986:1, 48, NCDP, 1989:10-11). Agricultural growth lagged behind the rate of total population growth of 3,1 percent (CSO, 1984:1).

Much of the growth in agricultural output has been due to commercial marketed production. On the other hand, the real rate of growth in traditional agriculture has remained almost stagnant and its share of the sectoral output has been declining. The rural population can feed itself, but the problem is that it must also produce enough to meet urban population food requirements. Consequently, agricultural production needs to grow by more than 3,1 percent per annum to satisfy the food demand created by the rapid increase in population. The fast-rising urbanization also places considerable strain on agricultural production.

Current farming patterns

One of Zambia's major assets is the abundance of land, which is sparsely settled. Although the average population density is about 8 persons per square kilometer, in some areas the density drops to two persons per square kilometer (NCDP, 1989:54). Much of this land is not utilized. By 1986, only 2,0 percent of all possible cultivatable land was under major crops.

Zambia's agricultural production derives from two subsectors: commercial and traditional. The traditional subsector is based almost exclusively on food crops: maize, cassava, sorghum, groundnuts, beans and millet. On the other hand, the commercial sector's contribution centres on the commercial crops: coffee, tea, sugar cane, wheat, seed maize, soyabeans, tobacco, beef cattle, dairy cattle and pigs. This sector has two categories: privately owned farms and parastatal estates. Most of the commercial farmers are whites who contribute most of Zambia's marketed crops - 37,0 percent of maize and 44,0 percent of beef (CSO, 1989:vi, 6, 8).

Commercial farming is very productive, with high yields per hectare, e.g. 51,7 bags of 90 kg of maize per hectare compared to about 3 bags for traditional farming (CSO, 1989:9). In Zambia commercial farming is labour-intensive. This is vital for Zambia, which has been experiencing a general decline in the performance of its economy since the mid-1970s. This decline has seriously affected the capacity of the economy to generate employment at a time when the labour force is growing rapidly because of the rapid population growth (NCDP, 1989:60). The commercial subsector offers employment to about 65 857 Zambians, of whom 20,8 percent are females (CSO, 1989:38-40).

Commercial farms are mostly situated in areas with the best soils and good communication. As a result of the 1975 land reforms which abolished freehold land, commercial farms are on leasehold land, on a 100 years' renewable lease. In terms of land-use services and administration, leasehold land attracts overwhelming benefits, especially capital investments in agricultural land. By using their leased land as a collateral for credit, commercial farmers have been able to attract investments in land to build up the quality of the soil, to improve the drainage by digging ditches or levelling to protect crops and stop soil erosion. Wherever needed, irrigation systems have been introduced. Commercial farmers are also able to obtain seasonal requirements of seeds, fertilizers, pesticides and labour. With all these investments, the commercial farmers remain the backbone of Zambia's agricultural production.

Estate farming

Estate farming plays a key role in terms of employment creation, productivity and generating foreign exchange through export crops. Crops grown on estates include bananas, sugar cane, tea, coffee, pineapples and wheat. In this paper, only three estate crops, sugar cane, tea and coffee, are examined for illustrative purposes. Sugar cane is grown, under irrigation on two adjacent estates, Nakambala Estate, owned by the Zambia Sugar Company, and Kaleya Small Holder Scheme.

Zambia began producing its own sugar from sugar cane in 1973. By 1979 Zambia became self-sufficient in sugar and, a year later, in 1980, it began exporting sugar. The production of sugar has increased not only steadily but rapidly, from 68 125 metric tonnes in 1973 to 158 000 metric tonnes in 1989 (Nakambala Files). Most of the sugar produced is exported, thereby contributing to the country's foreign exchange. Further, sugar cane

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production is labour-intensive and some aspects, such as the cutting of sugar cane, cannot be mechanised. Nakambala Sugar Estate alone offers employment to about 5 000 workers.

Coffee is grown under irrigation, mainly by Zambia Coffee Company on 400 hectares at Kateshi Coffee Estate in Kasama District, and Mpongwe Development Company on 135 hectares (NCDP, 1989:104). Coffee is also grown by some commercial farmers and small-scale growers in Northern, Copperbelt, Luapula and North-Western Provinces.

Zambia began to produce coffee in 1978 when 55 metric tonnes of coffee were produced. By 1989 Zambia was producing over 1 000 metric tonnes of coffee, a staggering increase of 1 900 percent. In 1985 Zambia began to export coffee; 377 metric tonnes of coffee was exported, by 1989 the amount had increased to 600 metric tonnes. However, Zambia continues to be an importer of coffee by choice. Zambia produces high-quality arabica coffee which is exported and in turn imports cheap-quality robusta coffee for local consumption.

In addition to generating foreign exchange coffee growing is labour-intensive and thus contributes to the attainment of the national objective of employment generation. A number of activities such as rearing, new planting, spraying, desuckering/pruning, leaf and soil sampling and weeding are done manually. Statistics on labour requirements on Kateshi Coffee Estate show that an average of 12 950 man-days are utilized per month. However, in peak labour demand periods, such as the peak picking period of coffee berries in June and July, over 26 000 man-days are needed for picking alone (Zambia Coffee Company). However, labour demand is seasonal - the labour demand for picking drops off for most of the season. Coffee growing, therefore, is a significant contributor to the creation of wage employment opportunities in rural areas.

Tea is grown under irrigation at Kawambwa Tea Scheme, in Kawambwa District, which is owned by the Kawambwa Tea Company Limited. Growing of tea began in 1969, with 8 hectares. In 1990 there were about 500 hectares under tea plants (Kawambwa Tea Scheme files). Equally, the production of tea has been rising steadily from 11 metric tonnes in 1976 to 1 000 metric tonnes in 1989. Initially tea was produced as a substitute to imported tea. By 1983 Zambia was producing enough tea to meet local consumption, and by the late 1980s Zambia became an exporter of tea.

Like coffee, tea production is labour-intensive. Labour is required for planting, plucking, pruning/tipping, weeding, fertilization, spraying, loading, centering and nursery work. At Kawambwa Tea Scheme the estimated average labour requirement is 39 man-days per hectare per month. However, some of the tasks such as pruning require more man-days per hectare. Because of the varying labour demands of various farm tasks, total labour requirements fluctuate throughout the season.

To sum up, the analysis of estate farming demonstrates how successful this form of farming has been. The success includes an increase in area under crops, productivity generation of income, employment and foreign exchange. Thus the performance of estate farming in Zambia presents a very different picture from what is generally known of Zambia's agricultural performance.

Traditional sector

Farming in this sector is mostly subsistence farming. Although all rural households have access to land, most of the farmers lack basic requirements for productive farming. Lack of access to relevant technology, input, training, credit, appropriate pricing policies for

purchasing inputs and agricultural commodities contributes to low productivity. The average farm size is small, farmers rely on hand cultivation and household labour. Production is mainly for home consumption, only a few produce a surplus for the market. Many households cannot produce enough food to support the household. Those who can afford to buy food from markets, others starve. With appropriate farming systems, a hectare of land could provide a family with sufficient food and also a surplus to supply cash income for purchasing at least the basic necessities.

Most of the area under crop is farmed the traditional way. The traditional farming sector also has the largest number of households headed by women as well as the largest number of aged and single member households (Chilivumbo & Pagaran, 1987:76). This subsector possesses immense potential for agricultural productivity. In reality, however, much of the subsector has always been on the periphery of developmental programmes.

Productivity in this subsector has also been adversely affected by the government's strong support of maize even in areas where cassava, millet and sorghum have been traditional crops. The support for maize has excluded the other crops from benefitting in investment in research, extension, inputs, markets, processing and infrastructure. Instead of promoting each crop in areas where it has been traditionally grown, the Government has instead vigorously promoted the growing of maize even in areas where it is not traditionally eaten. This policy has drastically changed peoples' food habits, forcing the entire nation to depend on maize. Current efforts to reverse the policy have come too late.

Low productivity is also a result of the lack of appropriate agricultural policies, technical and marketing support. The problem of agricultural development in this subsector has been how to utilize the land more efficiently to increase agricultural output, both of food and cash crops, by increasing the productivity of land, labour yields per hectare, yields per labour input, to create a surplus for exchange, with some benefit to the producer. Such agricultural development can only come about by means of innovations in both production technologies and social organization, when new production techniques are adopted, when oxen and plough replace the hoe, when mechanical power supplements human and animal power; when new inputs such as fertilizers are used and the improvement of the marketing system of crops and livestock is undertaken.

However, such innovations not only require changes in physical and organizational infrastructures such as roads, but also in agricultural extension, credit institutions, acquisition of farm skills, farm training institutes, and the distribution of inputs. To the small-scale farmers these can only come about through external intervention. Since independence the government has been trying various strategies to improve agricultural productivity in this subsector. Some of these programmes which are mentioned briefly, include extension services, agricultural development projects and cooperatives.

Extension services

Extension services are provided free of charge to farmers by the extension branch of the Ministry of Agriculture. The basic aim is to impart agro-knowledge, develop skills, demonstrate the correct application of scientific methods, and give guidance to peasant farmers about the correct periods for clearing and ploughing the fields, sowing, soil-thinning and which fertilizer to apply where, when, how and in what quantity. The extension branch also provides agricultural loans and distributes inputs.

Although the central objective of the extension service branch is to extend its services

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to all farmers, its main constraint has always been limited staff and transportation. Because the number of staff is limited, the agricultural assistants and field demonstrators have an unrealistically high work load. They are required to keep in touch with each farmer in their area, but do not have enough time to do so. The result has been selective extension services based on both agricultural performance and gender. The services are concentrated on a few already well-to-do farmers. Further, information on extension services in Zambia indicates that agricultural information services continue to bypass females (Lombart & Tweedie, 1972; Dodge, 1977; Chilivumbo & Kanyangwa, 1985).

Cooperative unions

Since independence, cooperative movement has been regarded as the best vehicle for involving greater mass-participation in improved farming. According to President Kaunda (1979), "So far, man has not invented a better vehicle for participation by everyone in his economic affairs than a cooperative. Indeed this falls in line with our political philosophy of participatory democracy and power to the people."

Cooperatives are organized around cooperative societies. To exist, a society must have a minimum of ten members. All the societies in a province are coordinated by the provincial union, and the nine provincial unions are coordinated by The Zambia Cooperative Federation. Membership of a cooperative union allows access to intensive extension services and agricultural loans that can be used to purchase agricultural supplies, inputs, tools, and occasionally labour.

The provincial unions also provide marketing facilities for maize, rice, groundnuts, beans, sunflower and sorghum at a fixed price. Cotton and tobacco are bought by Zambia Link Company and National Tobacco Company respectively. The unions buy the marketed crops from both members and non-members of the cooperative societies. Mills, which have all been nationalized, can also buy crops directly from growers.

However, the small-scale farmers have no say over the price of their produce, as Chilivumbo (1986:106) puts it: "The peasants produce; others determine the value and the price of their produce. In this way it is correct to refer to the peasantry as the silent producers". Generally, the prices offered are low (Chilivumbo, 1986:108) and the mode of payment extremely irregular. Farmers are not paid on the spot, but are given receipts and must wait for cheques to come. Payment is often delayed, sometimes farmers wait many months.

Large-scale development projects

These large-scale development projects are primarily concerned with broad issues of rural development of which agricultural development is a central issue. The projects embody a model of purposive, planned intervention to accelerate growth and development. These projects concentrate resources on certain priorities, mainly production increase in cash crops, they focus on a circumscribed geographical area and target a specific group: improved farmers. These projects are funded by either international organizations or governments. The consequence of this funding has been the partitioning of rural Zambia, because each donor claims a part of the country where it operates to the total exclusion of others.

Among the major projects are the Southern Province Agricultural Project, run by the World Bank and the Food and Agricultural Organization (FAO). Its zone of influence covers the entire Southern Province. The Germans run an Integrated Rural Development Project in

Serenje District, Central Province, and another project in Siavonga District in Southern Province. The Overseas Development Agency (ODA) is active in most parts of Eastern Province, the Dutch run projects in Senanga District, North-Western Province and in Choma District in Southern Province. The Swedish International Development Agency (SIDA) has many projects in various parts of the country, while Norwegian Overseas Development (NORAD) claims a large chunk of Northern Province. The Finland International Development Agency (FINNIDA) has extended its wings in Luapula Province and in certain parts of Western Province.

Notwithstanding some minor differences due to national orientations, the basic strategies are the same irrespective of who funds the programme. In all these projects, technical factors are central. All the projects are capital-intensive. Much of the funds goes to improve the physical infrastructure such as roads, bridges, transport facilities, marketing and storage depots and to support a large contingent of its highly salaried "experts", forming a top-heavy and expensive bureaucracy. A very small proportion of funds are directed to target groups to achieve optimal agricultural productivity. The projects provide credit funds, but only to a few progressive farmers. Tractors and ploughs are available for hire, while inputs such as fertilizer, high-yielding seeds, pesticides and other chemicals are made more readily available. Marketing facilities, training and extension services are strengthened and improved in terms of both numbers and quality of agricultural officers. Scholarships are normally offered for agriculture-related courses at overseas universities.

The effectiveness of these projects is measured by the degree to which the project accelerates economic growth and raises the yield of cash crops per hectare. The result is that the beneficiaries of these projects are often the well-to-do small-scale farmers. Further analysis of project budgeting shows that a very small proportion of capital goes to the actual improvement of farming.

Targeted projects

The target group is the rural poor, those who are on the threshold of relative poverty, who cannot be the beneficiaries of the orthodox farmer support programmes. Although there are several such programmes, this paper discusses only one programme for illustrative purposes: the "SIDA Women's Participation Project", funded and run by the Swedish International Development Agency (SIDA). The target group for the SIDA Women Lima Programme is women. Its basic aim is to assist women to take up cash crop farming. Cash crops, unlike crops grown for food, require careful management and inputs like fertilizer, herbicides, pesticides and more labour. Farmers normally cannot afford to buy these unless they obtain loans from lending institutions. In Zambia it has always been difficult for women, whether married or unmarried, to gain access to credit due to the legal system and traditional customs that regard women as minors, thus excluding them from such facilities. In addition, although improved farming requires certain skills and knowledge, extension agents often concentrate on men, neglecting women, thus making it more difficult for them to get involved in cash crop farming. It is these constraints that the SIDA Programme seeks to redress.

The programme aims, among other things, at making married and unmarried rural women economically self-reliant by encouraging them to grow cash crops for sale. Women are organized in groups of about 20 members within a geographically delineated area. Lima is a vernacular word which refers to a quarter of a hectare. Each district that is running a

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women's project has a coordinator, a woman, based in the district's department of agriculture. The district coordinator has a four-wheel drive vehicle with a driver. Under her are women field assistants, based in the rural areas, about one field assistant per group. Initially each woman starts with a quarter of a hectare which can be increased, depending upon the woman's performance.

The Lima programme provides its members with seasonal loans, inputs and training in improved farming. Intensive extension services are offered by female agricultural field assistants who closely supervise each woman during planting, fertilizing, weeding and harvesting. At the end of the crop season, after the harvest, the loan is repaid with 10 percent interest and another seasonal loan can be obtained.

The programme supervises the groups for a period of three years, after which it is assumed the participants are able to manage at least a quarter of a hectare on their own from which they can earn some income of their own.

Both financial and technical assistance are confined to women who are members of the group. The programme is exclusively for participating women members of the household, and normally only one woman per household is permitted. The extension workers advise members only, the rest of the household is left out. Similarly, financial and material support are limited to the Lima plot only, i.e. the woman's plot that is separate from the household plot. The results so far show some success (Chilivumbo & Kanyangwa, 1985).

WHAT HAS GONE WRONG WITH THE ZAMBIAN AGRICULTURAL ECONOMY?

Colonial heritage

It is not possible to pinpoint the necessary and efficient causes which can adequately explain the poor performance of the Zambian agricultural system. This section does no more than offer tentative explanations. One explanation is to be found in the agricultural policies pursued by both the British South African Company, which initially ruled Northern Rhodesia till 1926, and the Northern Rhodesia Government. Their main concern was prospecting for minerals and the attraction of settler farmers to engage in crop farming and cattle ranching. In order to raise money while stimulating the movement of cheap labour to the mines on the Copperbelt and in South African the administration imposed taxes. Since there were no chances of employment locally and markets for crops were virtually not available, able-bodied men had little if any choice but to journey for inevitable labour contracts on the mines in order to raise the needed money. Those who remained in the rural areas were initially not allowed to grow cash crops, because the authorities wanted to ensure that their labour power could be mobilized for use in the existing European plantations and that they could be forced to emigrate. Indeed, the Provincial Commissions of North-Western Province was proud to recommend: "It would seem to be better policy to encourage the energies of Bakahonde in the direction of mining rather than agriculture". Meanwhile, the white settler farmers were busy lobbying against the buying of African-grown maize by the mines which employed a large number of people who needed to be fed. The consequence of this is summarized by Simmons (1974:23): "In buying maize grown on settler-owned farms, rather than maize grown on village lands, the mines discouraged the improvement of village agriculture and encouraged villagers to sell their labour instead of the produce".

Thus, in the colonial period the development of agriculture was almost synonymous with the expansion of European-controlled commercial farming. In addition to being situated

in areas with the best soils and good communication, commercial farming was a sheltered industry in that it was generously subsidised in terms of fiscal incentives, water supplies, soil conservation and price support schemes (UN/ECA/FAO). The concentration of government efforts on commercial farming was paralleled by a policy of neglect of the rural areas which were reduced to a reservoir of cheap labour. As compared to areas under commercial farming, traditional farming received a relatively modest proportion of national infrastructural investments, capital inputs, credit financing, extension services and marketing systems. (UN/ECA/FAO).

However, it would be an oversimplistic analysis to conclude that the colonial government did not make an effort to improve farming among Africans. Despite the expropriation of the fertile lands from the Africans, together with discriminatory marketing arrangements which favoured white settler farmers, the colonial government, especially after the Second World War began to promote improved farming among Africans. In 1948 the African Peasant Farming scheme was introduced to cater for all peasant households in the territory. Most of these were in Eastern and Southern Province. In the same year, 1948, the African marketing and producer cooperative unions were established in some provinces. Previously, European farmers, missions and government departments had sent agents to the villages to negotiate the purchase of required crops.

The introduction of marketing and producer cooperative stimulated access to cash crop growing. Records of the cooperative union indicate that there was widespread and growing interest in farming and that an increasing number of villagers began to turn to agriculture as a major source of income (Chilivumbu, 1986:18) such that, by 1964, the year of independence, there were many small-scale producers, especially in Eastern Province and Southern Province.

Post-independence policies and implementation

The subjection of agricultural production to politics, through planning and implementation, greatly contributed to the generally poor agricultural performance in Zambia. Agricultural and rural development programmes in Zambia have largely been shaped by budgetary decisions which affect their implementation and success (Nicholson et al., 1979). The Government's policy relating to investment, pricing, production and provision of infrastructure and services has influenced the degree of agricultural production. In Zambia the Government does not assign a very high priority to agriculture (NCDP, 1989). In the First National Development Plan, only 15,4 percent of total capital expenditure was assigned to the agricultural sector. The allocation for agriculture dropped by 4,1 percent to 11,3 percent in the Second National Development Plan, and investments in agriculture continued to drop in the Third and Fourth National Development Plans (NCDP, 1989:37, 38).

The government's low investment in agriculture illustrates glaring contradictions between its political proclamations and its policy implementation. Not only is public investment low in the agricultural sector, there is also relatively little private investment. Except for large-scale commercial farming, private and foreign investors prefer manufacturing and other related industries. However, some foreign governments, especially in the Scandinavian countries, and some international organizations such as FAO and the World Bank have shown keen interest in the agricultural development of Zambia.

The pricing policy of agricultural products is also determined, to a large extent, by political considerations, and does not give sufficient incentives to agricultural producers.

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Prices of all major crops are controlled by government and prices for food crops have been designed primarily for welfare reasons to make food affordable for urban consumers. The price of maize meal has always been much lower than the price paid to the producers. Instead of subsidizing production the government pays farmers prices that are far lower than world prices for food crops (Dodge, 1977). Therefore, the government, by over-taxing farmers, has made farming unattractive. Recent government efforts to reverse this trend is causing serious urban tension.

Population distribution

Zambia's urban population began to swell as soon as the colonial restrictions on migration to towns, especially for women, were removed. This set in motion a high rural-urban influx of people, mainly women who came to join their husbands. The result was a very high growth rate of urbanization. The urban population swelled from 20,5 percent on the eve of independence in 1963, to 40,9 percent in 1980, and about 50 percent by 1990 (NCDP, 1989:54).

The agricultural implications of this rapid urban population growth are far-reaching and have created a major problem of how to provide sufficient food to feed the agriculturally non-productive urban population. While reducing the number of rural food producers, the rural-urban influx at the same time increases urban food consumers at a time when there is low growth in the traditional agricultural sector. This necessitates food imports, which put pressure on the country's foreign exchange reserves. It is clear that a major effort is needed to raise the rate of marketed food production in order to feed people who voluntarily gave up farming for the lures of urban life.

Production by the masses

The crucial choice facing agricultural development both at independence and now has been whether the strategy should be to encourage the emergence of a rural society based on production by the masses of peasants, or by a few medium- to large-scale commercial farmers. Because of its humanistic policy, Zambia chose to promote production by the masses. Right from the start this scenario was doomed to failure, as shown by the collapse of many of the post-independence experiments, including the cooperative movement which President Kaunda had hoped would be the basis for participation in production by the masses. It was hoped that, by encouraging the peasant masses to be involved in improved agricultural production, there would be an increase in total production and an improvement in the standard of living of the rural people. Other programmes which were tried include large-scale state production units, collective ranches, intensive development zones, intensive rural development programmes, rural reconstruction centres and settlement schemes. While wider participation in agricultural production may be of benefit to the rural people, agricultural performance could have been more successful had the option of mass production by a few farmers been chosen. However, political considerations prevailed over economic rationality.

It is now clear that promoting agricultural production by the masses is a gargantuan undertaking which has resulted in the failure of the agricultural economy of Zambia. This poor performance only highlights the Zambian Government's dilemma between policy and implementation. This dilemma is summed up by Mabao (1985:232) when he notes: "At the same time a depressing feature of public policy that strikes the observer has always been the deep chasm between declaration of intent and concrete action".

Unfavourable political environment

The political environment in most parts of Africa has not been very favourable for agricultural development. There are very few stable governments and Zambia has so far been one of them. However, Zambia has been an island in a sea of political turmoil arising from the liberation wars in Mozambique, Angola, Zimbabwe, Namibia and South Africa. This political instability has been a major obstacle to economic planning in Zambia and has had an adverse effect on the entire national development. Despite being stable Zambia has been forced to spend much more on defence than on agriculture. This expenditure has been increasing since 1965 when Southern Rhodesia declared unilateral independence. Since then Zambia has been forced to maintain a large army and air force, to buy expensive military wares including jet fighters that it basically did not need, for its internal security. Further, although not at war, Zambia has experienced destruction of her infrastructure such as bridges, roads, etc. from the exporters of violence from the south. All this has had an adverse and disproportionately negative impact on agricultural development.

CONCLUSION

Zambia is geographically a large country with a diversity of climatic, topographic, agro-economic and soil zones. Zambia has potential for a strong economy based on the agricultural sector. However, this potential has not been utilized fully. Rather than extracting a livelihood from the soil, the rural labour force opts to migrate to town, to live under poor urban conditions. Unlike the urban poor in South Africa or Zimbabwe, the Zambian urban poor has a choice to make. The urbanite can choose to go to the rural areas, get land and scratch out a livelihood of some sorts, or stay in urban centres, starve and die. Unfortunately the latter option is most favoured. But why and how can people opt for a scenario that leads to their own destruction?

The answer must lie in the government's agro-economic policies which have made agriculture unattractive and in its policy of urbanization. The widespread proletarianization in Zambia arising from unchecked rural-urban migration does not lead to profitable release of land for increased agricultural productivity. Rather, it decreases the agricultural productivity by allowing an active labour force to leave the rural areas. On the other hand, this process creates prerequisites for the planners to move towards a consolidation of the released land into larger, viable and productive units whose major goal should be to accelerate agricultural production by utilizing high or medium technology, and relying less on labour-intensive farming techniques. Preference of estate farming underlines this line of thinking.

Second, the time is ripe for planners to begin to get away from the synthetic myth that regards maize as staple food crop for Zambia. A realistic agro-policy needs to promote increased productivity of crops in areas where they have been traditionally grown. Because of their familiarity with the crops, the probability is high that the small-scale farmers would be much more receptive to the adoption of new skills and technology necessary to improve agricultural productivity.

Third, the small-scale producers should not be used as instruments of producing food crops to feed the urban population and to generate or save foreign exchange. The objective should be to achieve food security in rural households, earn some income, and first and foremost to ensure that they grow crops they are used to and are best able to handle. Production of surplus for the market should be a secondary priority.

Fourth, the current under-utilization of production capacity in the agricultural sector can only be reversed if the policy of production by the masses is replaced by mass production by a few.

In conclusion, it is necessary to emphasize that the Zambian agricultural sector faces many challenges. Zambian agriculture needs to meet the domestic food demand, and at the same time make a big and rising contribution to GDP, generate rural employment and income, keep industry supplied with material and satisfy Zambia's foreign exchange needs.

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