to show how government policy favors certain rural interests over others, and thereby recruits important allies in the rural sector. Government programs, we will argue, create and nurture rural clients, particularly among elite farmers, and thereby encourage patterns of collaboration that bridge the gap between town and country in Africa.

CHAPTER 3

The Food Sector:

The Use of Nonprice Strategies

The desire to promote the fortunes of industry and the need to appease the urban areas have led governments to adopt policies intended to provide low-priced food. As has been shown, however, the regulation of internal markets is difficult to achieve. Moreover, the importation of foreign supplies to depress local prices has become an unattractive option. Rising oil prices and demands from industry for imports of capital, machinery, and skilled manpower have intensified demands for foreign exchange. And given the overwhelmingly agricultural make-up of their countries, African governments have responded by promoting programs to reduce food imports by increasing domestic farm production.

This chapter focuses on the production strategies of African governments. It documents their efforts to directly engage in food production and to secure greater private production by subsidizing the costs of farm inputs. One important effect of these strategies, it argues, is their impact on the social and economic structure of the countryside: they confer benefits on the few and promote the fortunes of a small number of privileged farmers. A major reason for the use of these strategies is that they are politically fruitful. Their political attractions will be analyzed in Part Two.

African governments seek to promote food production by means other than raising commodity prices. Many directly engage in agricultural production, using the public treasury to offset production costs and thereby providing cheap food for the urban market. In effect, they enter the market for food and set themselves up as rivals to the peasant producers.

An example is the system of state farms in Ghana. Begun in 1962. the program expanded rapidly; by 1966, there were 135 state farms with a total of 20,800 workers. Hundreds of tractors were imported for these farms; one tractor was provided for every sixty to seventy acres. Between 1962 and 1966, the state farms received approximately 90 percent of the total agricultural development budget for the nation of Ghana (Nyanteng 1978, p. 4; Hill; Gordon).

The state farms were constrained to sell their products below the prevailing market prices. Dadson, for example, compared the prices offered by the state farms with the free-market prices for a variety of products-eggs, poultry, meat, maize, rice, vegetables, and others—and found that the state-farm prices "were consistently and significantly below the free market price" (p. 175). This, of course, was precisely their purpose.1 One result was that state farms could not meet the demand for their products. The consequences are well illustrated by the attempts in 1964 of the Workers Brigade, which operated a portion of the state farms in Ghana, to market kenkey, a popular food item. As recounted by Dadson: "In order to reduce the rising cost of food . . . in the urban areas, the Brigade embarked on a scheme whereby it sold to the public the popular corn food, kenkey, at about half the market price. . . . The scheme was popular and successful in Acera, but only for a short time; for, in order to keep the project going, the Brigade had to purchase corn from the local market at prevailing prices for processing and resale" (p. 176). This points to another result of the lowprice policy: overwhelming economic losses. Being unable to produce sufficient maize to meet the demand at the controlled prices.

the kenkey scheme had to buy maize elsewhere at the market clearing price. As a consequence it soon went bankrupt.

The fate of the kenkey project finds its parallel in the economic fate of the overall program of state farms. In a study of the Food Production Corporation farms in the Eastern Region of Ghana in 1971, it was noted that in seven out of eight farms examined, the annual gross receipts failed to cover one month's bill for wages and salaries (USAID 1975, p. 80)! The Agricultural Development Cornoration, which managed most of the farms, accumulated a loss of \$4 million in 1964, \$7 million by 1965, and over \$9 million by 1966 (Miracle and Seidman, p. 43).

The state farms of Ghana thus consumed an enormous portion of the public resources available for agriculture, and they accumulated large debts. In this respect, their fate parallels that of other public production schemes in Africa. The Farm Settlement Scheme of Western Nigeria, for example, consumed £6.4 million over a tenyear period. It has been estimated that over 50 percent of the total capital expenditure on agriculture in the 1962-1968 development plan went into these projects (Nigerian Economic Society, p. 142; see also Hill; Roider). By any criterion, these schemes failed. Investigations revealed that they produced little; what little they did produce, they produced at exorbitant costs; and what they earned was not enough to pay off their initial financing.

The farm projects of Western Nigeria and Ghana used conventional "rain-fed" technologies, but in recent years African governments have increasingly taken recourse to irrigation techniques. One example is the Chad Lake Basin Development Authority, which by 1978 had tens of thousands of hectares under food crop production. The costs of the Chad Basin project are enormous. In 1977-1978, for example, over N-39 million (naira) was budgeted for the River Authority (IBRD 1978). But these costs are simply not being recovered. Commenting in 1978, a World Bank report noted that "the value of the production obtained is less than the operating costs on some of the irrigated land" (IBRD 1978, p. 28; see also African Business, April 1980). Even such a famous project as the Gezira scheme in the Sudan, which produces food crops such as

^{1.} As Nkrumah had stated in parliament in justifying his production plans: "We must produce food so cheaply that even the worker earning the minimum wage . . . can be fully fed for not more than 2s [shillings] a day" (cited in Dadson, p. 26).

sorghum, rice, wheat, and millet as well as cash crops such as cotton, has tended to run at a loss; figures indicate that in not one year between 1971 and 1976 did the Gezira scheme turn a profit (World Bank, *Economic Memorandum on Sudan*, September 27, 1976, Table 4.5).

Although socially costly, both the farm schemes and the irrigation projects tend to be privately profitable for those fortunate enough to gain access to them. Roider, for example, notes that the earnings of those on the Farm Settlement projects of Western Nigeria exceeded those of nearby small-scale farmers; in fact, their earnings approximated those of low-level members of the civil service (p. 105). In the Sudan, farmers in districts with a high density of irrigation facilities earn three to five times the annual revenues of persons located in areas lacking these facilities (ILO 1975e).2 And data from Kenya show families in irrigation projects earning annual incomes in excess of 20 percent higher than those operating smallscale farms, 200 percent higher than those engaged in pastoralism, and nearly 100 percent higher than those earned by unskilled workers in urban areas (ILO 1978). The private profitability of such schemes is also indicated by the pressures exerted to gain access to them. Interviews with FAO project managers who were supervising irrigation schemes in Ghana disclosed the enormous pressures to which they were subject in the allocation of irrigation plots (Au-

2. Barnett, in his study of tenants in the Gezira scheme (1977), simply fails to take these data into account; it is clear that the tenants on the scheme are in many respects an economically advantaged group in the economy of rural Sudan. It should be stressed that the tenants on government schemes often secure a relatively high level of profits in spite of, and not because of, the way in which the project authorities manage farm production. In Gezira, the management requires the production of cotton. The tenants contend that they cannot make a profit from cotton at the prices paid for the crop and charged for inputs and services. While their claims may be exaggerated, it is certainly true that farmers can earn more by producing crops other than cotton. As a consequence, they have shifted out of cotton production and into the production of other commodities. The result has been clashes between the government, which earns much of its income from the export of cotton, and the tenants, who resent the loss of income which cotton production entails. Recent reforms, in which the government increased the tenants' share of cotton earnings, have failed to rectify the problem (see discussion in African Business, April 1980).

gust 1978). Dadson and Roider each document similar demands for access to position in the state farming projects. By comparison with many other farming opportunities, the state-sponsored schemes promise high private returns.

Public food-production schemes thus confer benefits on the fortunate few who gain access to them. The land used on state farms is often seized from small-scale farming communities without compensation (Dadson). The water used by irrigation agencies is often taken from the sources used by small-scale farmers, whether for food production, the dry-season grazing of eattle, or fishing (Scudder 1980, forthcoming). In addition, scarce public services—technical advisors, marketing services, schools, clinics, and extension agencies—that could have been offered to the small-scale farmer are instead put into the service of government schemes. Government-sponsored production units thus often promote the fortunes of a few privileged farmers at the expense of the small farmer in Africa.

Although they consume a significant proportion of the public agricultural budget, these projects nonetheless supply a small fraction of the total market. In the case of Ghana, for example, they provided less than 2 percent of the total marketed output of most commodities (Dadson). In light of such figures, it is inconceivable that they could have much impact on the prevailing level of food prices. Rather, their importance lies in the impact they have made on the social structure of the African countryside.

THE SUBSIDIZATION OF INPUTS

In their efforts to induce increased food production without taking recourse to increased food prices, governments in Africa frequently manipulate the prices of farm inputs. By lowering the price of inputs, they lower the costs of farming; they seek thereby to render farming more profitable, and to attract greater resources to it and evoke greater output from it. What is critical about the means governments employ is that they tend to promote the emergence of coteries of privileged, "modern" farmers. In part, this consequence

is intended; the structure of subsidies is designed to promote the adoption of new technologies. But in part it is a byproduct of the way in which the policy is designed and implemented.

The Pattern of Subsidies

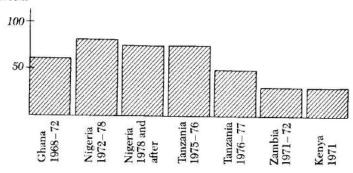
Governments in Africa subsidize fertilizers, seeds, mechanical equipment, and credit. They also take measures to promote the acquisition of land for commercial farming.

As illustrated in Figure 1, African governments confer subsidies on fertilizers which run from 30 to 80 percent in value. In many nations, fertilizer is imported duty free. Public support is also given for the purchase of mechanical equipment. In Ghana and Nigeria, farm equipment is exempt from duty; the overvaluation of the ex-

Figure 1.

Levels of Subsidization of Fertilizer for Various African Nations

Percent



Sources. Ghana: J. Dirck Stryker. "Ghana Agriculture." Paper prepared for the West African Regional Project. Mimeographed. 1975.

Nigeria: International Bank for Reconstruction and Development. "Nigeria: An Informal Survey." Mirneographed. 1978.

Tanzania: Ministry of Agriculture. Price Policy Recommendations for the 1978-1979 Agricultural Price Review, Annex I. Mimeographed. 1977.

Zambia: Doris Jansen Dodge. Agricultural Policy and Performance in Zambia-Berkeley, California: Institute of International Studies, 1977.

Kenya: Report of the Working Party on Agricultural Inputs, 1971.

Table 4 Fertilizer Imports, Nigeria

Year	Import value (N million)	Import quantity (1000 MT)
1970	1.6	34.1
1971	1.8	52.0
1972	4.0	83.0
1973	3.1	84.4
1974	6.1	83.7
1975	12.3	150.9
1976	20.4	207.8

Source. International Bank for Reconstruction and Development. Nigeria: An Informal Survey. Lagos: Typescript, 1978, Table 12.

change rate further lowers the perceived price of farm machinery imported from abroad. In Ghana, the Ministry of Agriculture subsidizes tractor-hire services up to 50 percent of actual costs (Stryker; Kline et al.); similar subsidies are provided in Nigeria (Okali). Most nations extend favorable tax allowances to the purchase of farm equipment. Tax holidays are offered to those making major investments in food production or processing; interest payments can be deducted; and favorable forms of capital depreciation are allowed. In Nigeria, an additional capital allowance of 10 percent is offered for expenditures on plant or equipment used in agricultural enterprises. Similar provisions are allowed in Kenya (Kenya 1971; see also Ekhomu; IBRD 1978b; USAID 1976; and Okali 1978).

Data from Nigeria suggest the effect of these provisions. Helped by the influx of revenues from oil exports, duties on fertilizer were canceled and prices subsidized beginning in 1972. In 1975, the duty on mechanical equipment was canceled and subsidies conferred for tractor-hire services and capital credits on the purchase of agricultural machinery. In light of these facts, the data in Tables 4 and 5 are suggestive.

As part of their policies to promote food production, governments also provide subsidies for the development and distribution of improved seeds. In Ghana, for example, the government paid for

Table 5 Tractor Imports, Nigeria

Year	Tractors: tracked		Tractors: wheeled < 40 hp		Tractors: wheeled > 40 hp		Total value
	Number	value (N million)	Number	value (N million)	Number	value (N million)	farm machine ry (N- million)
1973	202	3.0	397	1.3	468	1.4	6.1
1974	241	2.7	319	1.5	319	0.9	10.8
1975	1209	26.3	2576	13.8	1196	5.1	46.7
1976*	1922	29.3	1894	7.7	270	2.7	42.9

Source: International Bank for Reconstruction and Development. Nigeria: An Informal Survey. Lagos: Typescript, 1978, Table 16.

'January-November only.

one-third of the costs of new maize seeds and three-quarters of the costs of new rice seeds. In Nigeria, the government helped to finance the development of a new, if ultimately ill-fated, variety of maize (see Chapter Two). In Kenya and Zambia the costs of developing and distributing new seeds have been subsidized by the government (Gerhart; Dodge).3

To promote the purchase of these new inputs, African governments manipulate the price of capital. In Nigeria, the government has made credit available to farmers at 5 percent below the market rate of interest. In Ghana, the government funded the Agricultural Loan Bank; operating under government regulations, the bank could charge only 6 percent for its loans. The poor recovery rate

3. It should be noted that increased yields from the new varieties of seeds depend upon the use of fertilizers—a fact with important consequences. In assessing its needs for harbor and transport capacity to import sufficient fertilizer for distribution in conjunction with its newly developed maize seeds, the International Institute for Tropical Agriculture wrote: "By 1981, it will require more than three trains per week of over 50 rail wagons (30 tons) each to move fertilizers . . . from the port—if they are purchased in the most concentrated dry form available. Continued use of low analysis materials . . . will more than double the requirement for engines and rolling stock" (IITA, p. 67).

of this bank-63 percent in 1974-further emphasized the concessional nature of the credit offered to investors in food production (see USAID 1976; Girdner and Olorunsola). Lastly, governments have encouraged commercial lenders to move into agriculture by quaranteeing agricultural loans, thereby absorbing some of the risks of these investments.

Governments in Africa have also sought to cheapen the price of land. In Nigeria, the land decree of March 1978 reserves to the state rural lands not under active exploitation. The origins of the decree apparently lie in the desire of the Federal Government to acquire large areas of land "to be leased out on uniform terms to farmers as in the case of industrial estates, on which it 'will be much easier to provide extension services, agricultural inputs, etc" (from Guidelines for the Third National Development Plan, 1975-80, quoted in Gavin Williams, p. 49). Already negotiations are underway in Nigeria between the National Grains Production Corporation and private groups to engage in joint productive ventures on 19 farms of 4,000 hectares each (New African, June 1979, p. 97). The effect of the 1978 land decree thus appears to be to move land into commercial production, presumably at a price below that prevailing in the land market prior to the legislation.

In the Sudan, not only government corporations seeking land but also private investors seeking to engage in mechanized farming can obtain land at subsidized prices from the government. By 1968, the government had allocated 1.8 million feddans to private individuals (ILO 1975c, p. 1). In many cases, the government used its legal powers to transfer land from traditional production activities, such as nomadic herding, to the mechanized production of food crops without paying, or requiring that the private investors pay, compensation for the loss of rights to use the land for traditional purposes. The effect once again was to place a subsidized price on this input.

Under the terms of the Land Consolidation and Land Adjudication Acts of 1968, the government of Kenya has sponsored the wholesale transferal of land from a jurisdiction governed by customary rights to one governed by private rights. The intention was not to alter the price of land but rather to institute a method of allocating land rights-a private market-that would enhance the efficient use of resources (see Okoth-Ogendo). In practice, however, the reform of land rights has been exploited by those seeking to secure land below the free-market prices. The process by which public agencies have been used to manipulate the land market has been comprehensively documented by Njonjo.

It should be stressed that in reforming land laws, governments in Africa are responding to pressures from potential investors. One of the best examples is provided by Ghana, where potential investors from the southern and coastal communities lobby vigorously for legal reforms in the grain-producing areas of the savannah. The most visible arena for such lobbying is the law reform commission—a commission convened by the government of Ghana to revise codes and statutes, and dominated by lawyers drawn from the more affluent southern portions of the country. In 1977, the government convened the commission to review land law in Ghana; it came forth with a scathing criticism of the prices charged by "landlords" in the savannah. The commission noted that these prices could "become a hindrance for agriculture," and that the needed reforms should include "fixing a reasonable amount of money which should cover customary [obligations]" (quoted in Nyanteng 1978, p. 28). When the landowners were withholding land from the market-in other words, when potential investors could not secure land at a price they were willing to offer-then, the lawyers recommended, the "state should have the power to step in [and] make grants of vacant lands in that area" (ibid., p. 29). These recommendations constitute a plea for changing land law so that the state would have the power to depress the price of land for the benefit of private individuals who seek to invest in farming.

IMPLICATIONS FOR THE COUNTRYSIDE

The governments of Africa thus intervene in the markets for farm inputs-fertilizer, farm machinery, seeds, credit, and land. They do so in order to depress the price of the inputs and thereby enhance the profitability of farming. It is difficult to assess the impact of these programs on aggregate output or on the cost of food. It is easier to assess their impact on the distribution of income in the countryside. It is commonly and almost universally found that the poorer, small-scale, village-level farmers do not secure farm inputs that have been publicly provisioned and publicly subsidized as part of programs of agricultural development. The evidence suggests that the benefits of these programs have been consumed chiefly by the larger farmers, sometimes at the expense of their smaller counterparts.

Indirect Evidence

The best support for this contention is contained in investigations into the failure of small-scale farmers to adopt new technologies. Time and again these investigations reveal that conventional explanations are wrong. The village-level farmers do in fact know about the advantages of new seeds and of fertilizers; they do want to use them; and they are especially interested in securing them at their publicly supported prices. The reason for the failure of the new technologies to "diffuse" through the rural community thus has little to do with the attitudes of the village farmers themselves, as is commonly claimed. The problem instead is that the inputs are often not available.

One Ghanajan study of the failure of small farmers to adopt chemical inputs noted that "even though the farmers are prepared to purchase and use . . . fertilizer to improve their yields, fertilizer and chemicals were largely unavailable to them" (Armah, p. 20). In reviewing similar studies in Nigeria, the World Bank noted that "numerous micro-studies have been conducted in recent years indicating that [only] about 10 percent of the farmers do not understand the value of fertilizer or feel it will not produce yield responses. . . . All of the numerous studies identify the primary limiting factor as fertilizer unavailability" (IBRD 1978b, p. 34).4

^{4.} There are, of course, many other reasons for the failure of fertilizer programs in Africa. Even when fertilizers are available to the small-scale farmers, they are often not available at the right time. Moreover, Africa contains a great diversity of soils, and little research has been conducted on which fertilizers are appropriate for which soils. This lack of knowledge leads to the distribution of inappropriate vari-

Similar results have been found in studies of government-sponsored credit programs. Investigations in Ghana reveal a strong demand for public credit on the part of small-scale farmers; they also reveal an enormous frustration with the nonavailability of loans and an impressive expenditure of energies in attempts to extract them from the governmental bureaucracy (see Armah). A review of locallevel studies in Nigeria suggests a similar pattern (IBRD 1978b. pp. 35-36).

Although governments have sought to increase the production of food by supplying farm inputs at subsidized prices, the experience of small-scale farmers has been that these inputs remain scarce. But the government programs have been welcomed enthusiastically by wealthier and more powerful people. The resources allocated through these programs have been channeled to those whose support is politically useful or economically rewarding to the statethat is, to members of the elite.

Direct Evidence

Perhaps the best evidence of these trends comes from the savannah regions of West Africa. In response to government efforts to promote the supply of inexpensive food for the cities, there has arisen a cadre of commercially oriented, mechanized farmers-a group whose existence is predicated on the provision of government subsidies and whose membership consists largely of wealthy and politically influential members of the urban elite. An example would be the mechanized farmers of northern Ghana.

Mechanized farming began in the northern regions of Ghana in the 1960s, but burgeoned in response to the incentives provided in the late 1960s and early 1970s to encourage domestic food production. Under the policies mounted by the Ghanaian government, the northern farmers, like all farmers in Ghana, qualified for subsidized

seed, fertilizers, and credit; the evidence suggests that, unlike the small-scale farmers, they actually received these benefits. According to the agricultural census of 1970, the Northern and Upper Regions had only 22 percent of the total agricultural holdings in Ghana and produced less than 20 percent of the total value of Ghana's agricultural output. But one source reveals that over 75 percent of the fertilizer imported into Ghana in 1974, and virtually all of the improved seeds, went to the Northern and Upper Regions (USAID 1975, pp. 137-146). The government vigorously promoted the use of mechanized production techniques by those seeking to invest in the area. As one appraisal noted: "a relatively large number . . . of tractors and associated equipment . . . are available for initial land preparation. . . . The charges are artificially cheap owing to an overvalued exchange rate which keeps capital costs for tractors, equipment, and spare parts down" (ibid., p. 94). By 1968, the government had placed 907 motorized units in the Upper and Northern Regions (Kline et al., p. 388). And the evidence strongly suggests "that the tractor-hire service was well received by progressive farmers who were anxious to make use of it. . . . Apparently, the services offered were economical, from the farmers' point of view" (Kline et al., p. 122).

Evidence of the relative success of the large-scale farmers in securing subsidized credit is that in 1974, 56.3 percent of the total funds loaned by the Agricultural Development Bank were distributed to the 3.5 percent of applicants who were authorized to borrow £20,000 and above (Rothchild 1979). Moreover, government reports document a low level of repayment by the large-scale farmers. Only 44 percent of the agribusiness ventures, the large operations characteristic of this area, were in good standing in their loan repayments in 1974, compared with an overall level of 63 percent for farmers as a whole (USAID 1976, p. 16). Rates of repayment by the large-scale farmers were thus lower than that by other farmers. In particular, they lay below the rate of repayment by the small-scale farmers, who were faced with a harsh government credit policy: loans would be denied to any member of a village cooperative that included a farmer who had yet to repay a government loan.

eties. Moreover, extension agents, when they exist, often are poorly trained and give inappropriate advice. The result is that the farmers obtain few gains from the use of this input, thus weakening the incentives to adopt fertilizer or fertilizerresponsive varieties of crops.

My interviews with low-ranking members of a credit agency in Ghana furnish persuasive if impressionistic evidence of the role of privilege in securing subsidized credit. Respondents agreed that credit for food crops was not allocated according to commercial criteria but rather according to patterns of friendship and influence. They stressed that their attempts to apply commercial criteria in evaluating applications for funds led to rebuffs by superiors in the organization. Applicants would go over the heads of the professionally minded lower staff, and the staff would subsequently receive directives ordering the release of funds to specified individuals. "Connections" have thus played an important role in structuring the allocation of loan funds to the commercial food crop producers in the savannah areas of Ghana.

Equally striking has been the manipulation of political connections to purchase land in the savannah region. We have already seen that private investors have sought to reform land law in Northern Ghana. The evidence suggests that while awaiting these reforms they have used existing institutions to secure access to farm lands.

In contrast with the rest of Ghana, in the savannah areas of the north the state can exercise direct control over rights to "unused" or "waste" lands; these rights are allocated by the national department of lands. Members of the urban elite who seek to invest in farming and who have connections in the national bureaucracy have used the power of the lands department to secure acreages for food production. Indicative of this are the disputes involving the Karaga people of Dagomba and the Builsa people of the Upper Region on the one hand and the government bureaucracies and commercial farming interests on the other. According to one report:

Both Karaga and Builsa have been involved in disputes over land with stranger farmers-Karaga with Nasia Rice Company, and Builsa with a group of . . . farmers supported by political allies in the regional government. Both areas are latecomers to rice farming, and have learned from the mistakes of other [northern] communities. . . . Both have refused to sanction Lands Department leases. . . .

But these examples are exceptions: they could not be repeated in areas

where a significant number of stranger farmers have already made . . farms. And at least in Karaga and Builsa it would be hard for the traditional authorities to reclaim land from the tenants once it had been leased to them, as some powerful figures in Ghana are among their number. [West Africa, April 3, 1978, p. 647]

Using political connections to secure land, publicly subsidized credit and forgiveness of debts, publicly subsidized and allocated fertilizer, and highly favorable terms for the importation and financing of capital equipment, influential members of the urban elite with close ties to the managers of the public bureaucracies have thus entered food production in the northern savannah areas. The result has been a transformation of the pattern of agricultural production in the savannah zones. Rather than small-scale peasant farmers, the new entrants are large-scale commercial producers. Instead of hoes and oxen, they use tractors and combines. A major consequence of government efforts to promote food production in this area has been the development of disparities of wealth, social status, and political power within the savannah region.

When similar policies have been adopted elsewhere in Africa, the consequences have been much the same. One example is the growth of mechanized farming in the Sudan, with its debilitating effects on the environment and the threat it poses to pastoral production. Another is the development of large-scale farming in regions of pre-Revolutionary Ethiopia (see Cohen and Weintraub). A third is in the Rift Valley of Kenya, where government programs have promoted the mechanized production of grains, particularly wheat and barley, in what were formerly grazing areas. The production of these crops is sponsored by state grain corporations headed by persons of enormous political influence. A similar pattern appears to obtain in the middle-belt regions of Nigeria, where state corporations and politically important individuals are investing in mechanized schemes for the production of food. The policy responses of African governments to the problem of urban food supply thus appear to be leading to the entrance into the countryside of politically influential elites—elites who seek to augment their fortunes by engaging in food production, and who adopt farming technologies that fundamentally alter the social and economic patterns of the African countryside.5

In other areas of the developing world, the existence of elites deriving their wealth and power from agriculture antedates the commitment of national governments to programs of economic development. In these areas the politics of development became in part the politics of displacing these existing elites, as urban interests attempted to secure their capitulation to the new economic order. By contrast, at the time of the commitment to industrial development in much of Africa, the countryside contained few persons of landed power. It is the programs in support of economic development that have promoted the growth of such elites in the rural areas. The initial push toward industrialization has thus encountered far less overt resistance from the rural areas of Africa.

As will be seen in later chapters, however, these privileged farmers, despite the fact that they owe their position to governments dominated by urban interests, soon give voice to producer interests. What the small farmers cannot demand, the elite farmers do.

5. Moreover, the evidence suggests that in reaping disproportionate benefits from public programs, the large farmers do so at the expense of small-scale producers. Certainly the redefinition of land rights and the subsequent reallocation of land between "traditional" and "commercial" sectors represents such a redistribution. So, too, does the evidence concerning subsidized loan programs, already cited. Besides receiving the bulk of the loans from such programs, large farmers also more frequently default on them; the costs are passed on to the small-scale farmers in the form of higher interest rates. Redistribution also takes less obvious forms. In 1976-1977, for example, 50 percent of the cost of the fertilizer subsidy of Tanzania was to be paid for by funds from the crop authorities; the authorities in turn received their funds in the form of deductions from payments to farm producers. Insofar as such deductions are made from payments to both small farmers and large ones, and insofar as the fertilizer tends to be consumed by the larger farmers, the subsidy redistributes resources between two kinds of farmers. In Kenya and Tanzania, the costs of some farm inputs are financed by cooperatives; and studies show that while the costs are born equally by all members in the form of subscription payments, the benefits are consumed disproportionately by the larger members (a review of these studies is contained in Raikes). Public financing of the costs of farming thus leads to patterns of subsidization that favor the larger farmers, and at the expense of their small-scale counterparts. For further documentation of the large-farm bias in the provision of agricultural services, see Leonard, Bottral, Hunt, and Kenya (1971).

At present, governments have successfully co-opted them; they are rural allies of the regimes in power. But the basic conflict of interest remains, and as development proceeds and the community of large farmers expands, they and the interests they represent should become more powerful. Africa will clearly not remain immune to the political conflicts between agrarian and industrial interests that are an inherent part of the development process.

CHAPTER 4

The Emerging Industrial Sector

Thus far we have analyzed government interventions in the markets for products that farmers sell and in the markets for products they use in farming. There remains a last major market to be explored: the market for the commodities that farmers consume, and in particular the goods they purchase from the urban-industrial

Like governments throughout the developing areas, the governments of Africa try to promote industrial development, and every government in Africa has pledged to develop its national economy by creating domestic industries. This chapter will show that a major strategy for promoting industrial development has been to shelter new firms from meaningful economic competition, whether domestic or foreign. Consumers therefore inevitably pay for a part of the cost of industrialization in the form of higher prices. The consumers who concern us here belong to the farming population.

COMMERCIAL POLICY

In some African countries, governments have imposed commercial barriers to foreign competition rather quietly. In Tanzania, for example, the government is officially opposed to the use of public nower to promote the economic fortunes of private investors; nonetheless, it does seek the formation of local manufacturing capabilities, and as part of its policy of socialist development, it seeks to promote state-backed industries. The result has been the adoption of a structure of commercial protection that shelters local industries (Rwevemamu: see also Clark).

In other countries restrictions on imports, at least initially, have been imposed more in an effort to conserve foreign exchange than in an effort to promote industrial protection. Nonetheless, the measures rapidly become an instrument of economic protection. In Ghana, for example, significant restrictions on foreign trade were first introduced following large trade deficits in the early 1960s; in response to this crisis, the government imposed import licensing and foreign-exchange controls. As Killick notes, it was not long before criteria for allocating foreign exchange were formalized, and one of the key criteria "by which the import planners were required to allocate licenses was that of protecting local industries" (Killick, p. 278).

In other cases, however, the protective content of government policies has been explicit; it has been publicly affirmed in an effort to attract investments. Thus, Kenya in 1959 incorporated a schedule of explicitly labeled protective tariffs into its commercial legislation (Swainson 1977a, p. 149). In pre-independence Nigeria, Oyejide reports, the tariff structure was basically "revenue oriented." Within a year after independence, however, "the protection of the domestic market to encourage industrialization via import substitution had become an official policy; and since no serious balance of payments crisis arose until the tail-end of 1967 [with the civil war], it may be assumed that the tariff changes that took place within this period were primarily a direct consequence of this official policy" (Oyejide, p. 58). Commercial protection for domestic industries remains a prominent feature of Nigerian policy, as evidenced by the last major budget speech of the departing military government (see African Business, May 1979).

Governments offer tariff and import protection in efforts to attract foreign investment. The most thoroughly documented case is

Kenya, where Langdon has analyzed the negotiations between the New Projects Committee of the Government of Kenva and the representatives of foreign firms. The demands most commonly made in these negotiations were for protection from foreign competition, either through tariff protection or physical restrictions on imports (in 53 percent of the negotiations), and for concessions in tariffs and restrictions on imported supplies and capital equipment (in 32 percent of the negotiations). Over the period 1965-1972 protection was granted to manufactured products in 90 percent of the cases. and concessions were accorded for the necessary inputs in every case considered (Langdon; see also the works of Swainson). In a less detailed analysis. Young notes the adoption of similar measures in Zambia. And though we lack comparable data for other countries. government-offered incentives in the search for foreign investments appear to be standard fare throughout Africa.

Tariffs are one means of protecting local industries. In the African setting, physical restrictions on imports are even more important. Where they are a feature of commercial policy, the committees that control the allocation of licenses to import or permits to use foreign exchange become key centers for the allocation of economic shelters.

The operation of such committees has been briefly described by Fajama for Nigeria, Leith for Ghana, and the ILO-UNDP mission for the Sudan (ILO 1975d). Macrae gives a fuller treatment of the relevant body in Kenya, the Committee for Industrial Protection. He notes that one of the Committee's main tasks is to issue import licenses, and that the procedures it adopts give protection to key domestic industries. The Committee acts in response to petitions. As Macrae stresses:

Certain items are referred to specific bodies before an import license is granted. The Ministry of Agriculture must approve imports of millet and grain sorghum . . . cereals . . . prepared animal feeds, oranges, jams, beans, garlie, frozen vegetables and fertilizers. Import licenses for paints are issued on the recommendation of the Association of Local Manufacturers, as also are motor vehicle batteries; licenses for importing jute and sisal bags and sacks are issued on the approval of the Jute Controller. In

most cases this is to confirm whether local supplies are available, in which case license applications are refused. Some importers are granted a monopoly outright, e.g., import licenses for iron and steel-wire are issued to the Kenya Industrial Estates only. [P. 8]

Patterns of Protection

Evidence on the pattern of protection created by African governments, though widely scattered, exhibits one common feature: the level of effective protection exceeds the level of nominal protection. Both forms of protection result from barriers that favor domestic producers. Nominal protection is protection given to the price of products; when governments impose tariffs or quantitative restrictions on imports, they enable domestic prices to rise above the price of foreign goods. Effective protection is protection given to the profits of industries; it takes into account not only the impact of trade barriers on the prices of products but also on the costs of goods used in their manufacture. To encourage the formation of industries, governments must protect not only prices but profits. When they use tariffs and trade barriers to increase the price of a product, they must, if they wish to create incentives for its manufacture, therefore refrain from comparably increasing the prices of goods used in its production. It is indicative of the efforts of African governments to create incentives for the formation of industries that the level of effective protection exceeds the level of nominal protection; few barriers are placed on the importation of goods used by the industries but protection is given to their products.

Covernments in Africa have used commercial policies to strengthen incentives for local production. Evidence from the Sudan suggests a pattern of high nominal rates of protection but even higher levels of effective protection. Thus a team from the International Labor Office found, for industry, an "average effective rate of protection of 170 percent for 1971." It went on to comment that "since then further tariff concessions have undoubtedly increased protection," and to note that "this contrasts with the previous estimate of minus 27 percent for agriculture and illustrates the considerable induce-

ment given by price incentives policies to industrial as opposed to agricultural development" (ILO 1975d, p. 35). Rweyemamu, in his

study of Tanzania, concludes that "in most industries, the effective protective rates are considerably greater than the nominal rates," mainly because "duties on most raw materials and other inputs are either zero or very low" (p. 133). For Kenya, a World Bank study (and the Institute for Development Studies' papers it draws upon) reveals "the classic tariff structure, with average nominal duties falling from 29.6 percent on consumer goods to 18.0 percent on intermediates. and 17.7 percent on capital goods" (IBRD 1975, p. 265)-a pattern that would, of course, produce a rate of effective protection exceeding the rate of nominal protection. A similar pattern is found by Ove-

jide for post-independence Nigeria (Ovejide, p. 59).

Clearly, then, African governments have erected structures of protection that systematically favor the formation of domestic manufacturing capabilities. What is also suggested is that they have done so in particular for industries which produce goods for final consumption. This is suggested in Ovejide's data, where the highest rates of both nominal and effective protection occur for consumer goods. As Oyejide himself concludes, "the bias of the tariff structure [is] clearly in favor of consumer goods" (p. 58). Textiles, bicycles, processed foods and beverages, footware, clothing-these are the kinds of products most favored by the tariffs Nigerian policymakers have imposed. A similar pattern is documented for Tanzania, where Rweyemamu concludes that "there seems to be a tendency for consumer goods industries, and in particular the less durable and luxurious types, to be heavily protected" (p. 133). Included among the specific products protected in this manner are bicycle tires and tubes, sugar, beer, biscuits, soap, clothing, footwear, matches, and tobacco (ibid., p. 134). Similar patterns have been detected for Zambia (Young), the Ivory Coast (IBRD 1978a), and Kenya (IBRD 1975).

Thus, to promote industrial development, African governments construct protective barriers between the world and domestic markets which shelter local industries from foreign competition. And they give particular protection to industries that produce goods for final consumption.

SHELTER FROM DOMESTIC COMPETITION

Public policies to promote domestic manufacturing often inhibit domestic competition as well. In some cases, restrictions on comnetition at home are a byproduct of measures taken to restrict competition from abroad. In both Ghana and Kenya, for example, the tariff laws are written so that the incidence of protection is designated at the "six-digit" level of industrial classification (Pearson et al., p. 14; Macrae, p. 5); in effect, then, protection is extended to the individual firm. In Kenya, licenses to import goods listed on what is called schedule D, or materials for the manufacture of such goods, may be issued only after the Director of Trade determines that there is "no objection" to this use of foreign exchange. My interviews in Kenya reveal that local firms lobby strenuously to place their products on schedule D. They do so because they can then "object" to imports of their product or of material which could be used for its manufacture. The trade law thus shelters them from domestic as well as foreign competition. Most trade programs involve the allocation of quotas or licenses; these permits to import are often distributed in accordance with historical market shares. Use of this criterion has been recorded for the Sudan (ILO 1975d). Ghana (Pearson et al.), and Nigeria (Fajama). The effect, of course, is to freeze existing patterns of competition, thereby preventing the growth of more efficient and lower-cost firms.

Lastly, bureaucratic procedures for extending protection from foreign competition tend to give an advantage to larger firms, and this too promotes market concentration. Larger and better staffed firms have a systematic advantage in preparing justifications for demands for protection, or for rations of foreign exchange; in devising estimates of costs and in gathering and analyzing supporting data; and in handling the volume of paperwork involved in securing administrative action. As a World Bank study of Kenya found: "The entire system benefits large and well-established firms. Dealing with the bureaucracy requires time and money-both assets of large firms. The more complex the system becomes, the more important are these assets. . . . [Several new] firms have been squeezed out by . . . the allocation of quotas and the costs of dealing with the bureaucracy, [although] others with good connections have obtained licenses" (IBRD 1975, p. 298).

The restriction of competition in the domestic economy is not merely an unintended consequence of the procedures used to govern relations with the international market, however. The consolidation of industries is sometimes done on purpose. As Leith noted for Ghana: "The import-license system, since it had virtual life and death powers over most industries, came to be used as an industrial licensing system as well. The Ministry of Industries saw a conflict between the need for competition among domestic producers and the wasteful expenditure involved in duplicating underutilized domestic facilities, but generally resolved it . . . in favor of 'rationalization' of industries and against new entrants" (Leith, p. 32).

In other instances, the rights to import capital goods and inputs necessary for manufacturing a particular product have been purposefully restricted to particular enterprises. To secure the erection of an automotive assembly plant, the government of Kenya gave British Leyland the sole right to import particular parts and machinery (Swainson 1977a), p. 305); similar privileges were extended to Firestone to secure its investment in a domestic tire plant (Langdon, p. 172). The effect was the promotion of a virtual monopoly for both firms in their respective industries. The extension of exclusive rights to import has been used to promote investments in Zambia as well. There, too, it has resulted in the creation of domestic monopolies in several industries: cement, food processing, matches, sugar, building materials, petroleum, and textiles being cases in point (Young, pp. 193ff).

Governments thus use commercial policy instruments to promote the formation of their nation's industrial and manufacturing capabilities; and in so doing they often restrict not only foreign competition but also competition within the domestic market. It should also be noted that other policies have promoted industrial concentration; among these are tax credits, accelerated depreciation allowances, subsidized interest rates, and preferential duties on capital equipment. All these have been used by governments to promote the importation of capital and thereby lay the foundations for industrial development. Moreover, in negotiations with foreign investors, governments tend to favor those who promise larger investments. The result has been the adoption of capital-intensive technologies which are most efficient at high levels of output. But, by and large, the domestic markets of the African countries are small; there are few people and they are poor. Given the capitalintensive nature of the new firms and the small domestic markets, there tends to be idle capacity in many industries, and the incentives are thus strong to secure a reduction in the number of firms.

Again, though the evidence for this assertion is scattered, it tends to be persuasive. In a survey of forty-four Kenyan industries, for example, the World Bank noted that in only twelve of them was there a "reasonably full utilization" of productive capacity (cited by Godfrey and Langdon, p. 115). In Ghana, government estimates suggest that for state enterprises, output was 29 percent of capacity in 1963-1964. In 1966, actual manufacturing output was one-fifth of the single-shift capacity of installed plant, and in 1967-1968, manufacturing firms in Ghana used only 35 percent of their estimated capacity (Killick, pp. 171, 196).

It is clear that this idle capacity is perceived as excess capacity. A 1969 survey of the managers of manufacturing firms in Ghana revealed that "Only 24 percent of them thought that the market was big enough to absorb the full capacity output of the industry at ruling prices and 63 percent believed that industrial capacity exceeded the market size at any feasible price. No less striking, 37 percent of the respondents thought their own capacity exceeded the market"

(Killick, pp. 197-198).

Such beliefs furnish incentives to restrict competition. Evidence suggests, for example, that Dunlop chose not to enter the East African market for bicycle tires because Avon Rubber and Bata already had capacity "well in excess of the level of domestic demand" (Eglin, p. 117); this left two major firms in the industry. In a welldocumented case, Swainson indicates how firms in the Kenyan ce-

^{1.} Firestone's "concession" was limited to ten years. In 1979 the ten-year period came to an end, and a second firm now proposes to enter the Kenyan market (Weekly Review, January 26, 1979; also African Business, May 1979). Firestone is retaliating by increasing its production, thereby making entry less attractive.

An even more recent example comes from the Kenyan textile industry. In the early 1970s, Lonrho, the West German Development Corporation, and local Kenyan investors financed construction of the Nanyuki Textile Mills. In December 1977, the venture failed. An investment of £8 million and the jobs of 750 workers had been imperiled by the inability of the mill to produce cloth at competitive prices; as the management contended, "the Kenyan market was saturated" (African Business, September 1978, p. 31). Recently the firm has been reopened, under arrangements that are instructive. Its assets were purchased by a competitor, Mount Kenya Textile Mills, and the reopening of the failed firm was made conditional on a government guarantee banning the importation for sale in Kenya of secondhand clothing (African Business, December 1978, p. 60). Here, as elsewhere, internal and external competition has been restricted in order to promote the formation of domestic industries.2

INDUSTRIAL STRUCTURE

We lack good data on the structure of the industrial sector that has emerged as a result of these policies. But what little we do have tends to suggest that the total number of firms is small; that in each industry there are few firms; and that within each industry production tends to be concentrated within a very small proportion of establishments.

Materials from Kenya illustrate these points. In the manufacturing sector in 1972, there was a total of only 3,687 establishments. To appraise this figure meaningfully, at least two adjustments must be made. One is to adjust for the very small, highly specialized fabricators, such as local tailoring and carpentry shops. This reduces the number of firms by 1,715, leaving 1,972. The other is to look at the number of establishments in particular industries. We then see that the number of units producing sugar is eight; the number slaughtering and dressing meat, eight; the number ginning cotton, ten; the number spinning cloth, nineteen; the number manufacturing textiles, two; and so on (Kenya 1977, pp. 95ff). Thus not only are there few manufacturing establishments in Kenya, but also in any particular sector the number of establishments is small.

Elsewhere we find a similar pattern. In Tanzania, state or stateassociated firms controlled 57 percent of the manufacturing sector in terms of value added, or 47 percent when measured in terms of employment (Clark, pp. 64, 126). As Clark notes:

The parastatal [state-associated] sector is characterized by a heavy dominance of a few firms. The government has not created a sector composed of medium-size operations but one in which a few firms own most of the assets. . . . In many sectors only a few firms dominate. In mining, construction, and electricity, one firm has over 80 percent of the assets in each sector, and in agriculture and transport two firms have over 80 percent of the assets in their respective sectors. . . . Nine manufacturing firms (21 percent of total) own 74 percent of the assets in the sector. [Pp. 118–119]

In Zambia in 1969, there were but 431 manufacturing establishments (Zambia, 1971). Again, the number of firms per actual industry was small: two leather and footwear establishments, three spinning establishments, three firms producing vegetable oils, three producing canned goods, and so on (*ibid.*). And as in the case of Tanzania, the state-associated firms, organized under the Industrial Development Corporation (Indeco), controlled in excess of 50 percent of the manufacturing sector and in many instances operated virtual monopolies. As Young states: "For many of the Indeco com-

^{2.} Similar steps were taken to safeguard Kafue Textiles in Zambia (see Young, p. 194).

panies, and indeed for many private ones, the business environment was often less than ruthlessly competitive. Because of the scale of their operations, the more important new industrial projects were generally in a monopolistic position in the domestic market" (p. 203).

Ghana, in 1969, had 356 manufacturing firms (Ghana, Central Bureau of Statistics, 1971). In keeping with the state-centered thrust of its industrializing strategy, public enterprises dominated many basic industries. And as Killick notes: "Many of Ghana's state enterprises were monopolies or were selling in highly imperfect markets. Industrial statistics indicate that, in 1969, 83 percent of the total gross output of state enterprises was produced in industries in which state concerns contributed 75 percent or more of the total output of the industry. In six industries state enterprises accounted for the whole output" (pp. 220-221).

Obviously, these data leave much to be desired. They nonetheless suggest that the policies designed to promote industrial formation in Africa have produced a highly concentrated industrial structure. The total number of firms is small. Moreover, within particular industries, there exist few firms and a small number appear to produce a high proportion of the total output.

Consequences

In this chapter we have explored some of the basic features of policies affecting the growth of the industrial and manufacturing sector in Africa. These policies shelter firms not only from foreign but also from domestic competition. One result is that many inefficient firms survive in the African market.

Evidence of this is contained in the figures on excess industrial capacity, which suggest that many firms fail to operate at the costminimizing levels of output. Further evidence is contained in qualitative descriptions of the difficulties of operating modern plants under conditions prevailing in Africa. Schatz (1977), for example, in describing the problems bedeviling new enterprises in Nigeria, reports that equipment was ordered at a long distance from

its place of design and manufacture; the result was economic losses from inappropriate equipment and from delays while awaiting corrections in deliveries. Because of long distances and problems in transporting, offloading, and storing, machinery often arrived in poor condition, and this led to further losses. Once they arrived, the machines were often improperly installed; the results were either high operating costs or costly delays while awaiting rectification. Often the equipment could not employ local inputs. A furnace might be unable to work local silicons, or a textile plant might be unable to secure fibers of appropriate length from local producers. Problems such as these, Schatz notes, repeatedly plagued efforts to establish new firms. Killick paints a similar picture of the problems facing firms in Ghana. The obvious corollary of their discussions is that the firms are inefficient and incur high costs, and that without substantial protection from meaningful economic competition, many of them could not survive.

The survival of such firms entails substantial costs, and it is consumers who pay.3 When protection is offered against lower-cost for-

3. Thus Nkrumah is quoted as stating: "It may be true in some instances, that our local products cost more, though by no means all of them, and then only in the initial period. . . . It is precisely because we were, under colonialism, made the dumping ground of other countries' manufactures and the providers merely of primary products, that we remained backward; and if we were to refrain from building, say, a soap factory simply because we might have to raise the price of soap to the community, we should be doing a disservice to the country" (quoted in Killick, p. 185). Nonetheless, it is also true that the public as a whole bears the costs of government policies which reward particular private interests. Many therefore take a different view, based on a clear perception of the redistributional nature of the policies designed to promote local manufacturing. Such a view is expressed in the following letter penned by one of Nkrumah's countrymen. The conflict in viewpoint is sharp and fundamental, though raised in droll language: "In Ghana, if a company is able to produce an inferior type of product which has been lying in a warehouse unpatronized for years, it then runs to the government claiming that . . . the government should stop the importation of such items. This is usually quickly agreed upon . . then all of a sudden, the papers tell us that such and such a product is being banned forthwith since we are self-sufficient in that field. . . . Because of Union Carbide, the importation of batteries was restricted and a torchlight battery sells at between © 2.50 and © 3.00; because of G.T.P. and Akosombo Textiles, no importation of cover cloths, and a piece of Dumas sells at between € 150-€ 200; because of Lever Brotheign goods, the result is an increase in domestic prices. And when domestic competition is restricted, firms can secure prices that give them higher profit margins (for evidence, see House, p. 12).4 The result in both cases is a rise in consumer prices.

DISCUSSION

In earlier chapters, we have argued that pressures from the urban sector generate demands for policies to secure lower consumer prices. In this chapter, we have stressed the role of urban interests in securing policies that increase prices to consumers. The contrast is significant and important; and the apparent conflict can be resolved in a way that gives insight into the interplay of economic interests in the policy-making process.

We can begin with a single industry. It is reasonable for those who derive their incomes from the production of a product to seek a higher price for it. This is true of workers as well as the owners of firms, for both derive their incomes from the production of a particular good. But they spend their incomes widely, devoting but a small fraction, in most cases, to the purchase of the good they produce. Thus they benefit from an increase in its price.

Insofar as governments respond more readily to business combinations than to individuals, it is also reasonable for those who derive their incomes from making a particular product to combine with persons from other industries in seeking protection for their products. Makers of tires, for example, can often do better in seeking government support for higher prices if they receive at least the tacit backing of the makers of bicycle frames. And it is advantageous for persons from several industries to combine in this manner.

Those who derive their incomes from the production of tires would gain from the increase in earnings which a rise in their own price entails; and they would lose only a portion of this increase from having to pay higher prices for bicycles and flashlights, for example, with whose producers they may have combined in their lobbying efforts.

There is a limit to this logic, however. Not all industries are equally attractive partners in this price-setting game. In particular, if one industry's product requires the expenditure of a very high portion of a person's budget, then persons will look for other industries when seeking partners with whom to combine in petitions for higher prices. In Africa, as in other poor areas, food is such a product; as much as 60 percent of the average urban dweller's budget is spent on food purchases (Kaneda and Johnston). In the formation of combinations to secure price increases, food producers are therefore unattractive partners, and tend to be excluded from pricesetting coalitions (see Bates and Rogerson). Demands for higher prices for industrial products and lower prices for agricultural goods are thus an expected result of the free interplay of interests in attempts to lobby and thereby influence product prices. 5

Other factors also help to resolve the apparent contradictory behavior of urban interests. By offering high levels of effective protection to an industry, the government can secure higher returns to all factors operating in that industry; this provides an incentive for capital to move into that industry, but it also enhances the value of labor. Labor and capital can both share in the gains generated by protection. The demands of labor which we discussed in Chapter Two are thus, ironically, assuaged by policies that try to provide incentives for capital investment by conferring higher prices on manufactured products (see also Arrighi).

It should be noted that not all farmers suffer as a consequence of this dynamic; certainly, they do not suffer equally. As noted in Chapter Three, for large and privileged farmers, the impact of adverse prices is offset by the conferral of subsidies. Moreover, the

ers (Ghana) Ltd., you can't import any type of soap, all you can get (toilet soap) ranges from \$\mathcal{C} 2 - \mathcal{C} 2.50. . . . Yet all these factory managers claim they can meet the demands of the entire population" (West Africa, October 16, 1978).

^{4.} In light of what we have noted above, it is instructive that House was unable to disentangle two separate effects: one arising from industrial concentration and the other from capital requirements to start new firms. Plant size and economic concentration went together, and both related to the capacity of firms to secure favorable price-cost margins.

^{5.} Relevant here are the analyses of the terms of trade between agriculture and industry. See the works of Maimbo and Fry, Dodge, Sharpley, and Killick.

producers of some crops are able to secure increases in prices for the goods they sell, and these help to offset the higher costs of the goods they buy. In particular, those who, like the food producers. are able to avoid government marketing channels can shelter themselves from the adverse shift in prices. The small farmers and the farmers who produce crops whose marketing is effectively dominated by government marketing agencies are less able to avoid government policies and so suffer most.

CONCLUSIONS

As with governments elsewhere in the developing world, governments in Africa seek to industrialize. They do so in part by sheltering domestic industry from foreign competition. They also protect firms from domestic competition. Characteristically, industries in Africa are dominated by a few large firms; sometimes they are dominated by a monopoly; and often, the major firms are government-owned. Under such sheltered conditions, inefficient firms survive. And consumers, including farmers, pay higher prices.

Many would argue that the burden of higher prices represents a cost of the transition to an industrialized economy. Bergsman, for example, reappraised the economic growth of Korea, the Republic of China, Brazil, Singapore, and other semi-industrialized countries and stressed that their development involved passage through an initial stage that closely resembles that characteristic of contemporary Africa. Nonetheless, while these conditions may be a necessary prelude to later industrialization, they clearly are not a sufficient condition for it. This argument is supported by Bergsman's analysis, which notes the failure of other economies, and it should give pause to those who would see in the experience of these countries a promise of successful industrialization in Africa.

Several characteristics distinguish the now semi-industrial states from their less successful counterparts. One, Bergsman contends, is their policies toward agriculture. In addition to the protected conditions afforded their industries, many of the governments of these states also provided a strong stimulus to farm production: "favorable prices plus heavy investment plus good access to inputs," in Bergsman's words (p. 80). Such policies contrast sharply with those found in most of Africa. Another distinctive characteristic of successful cases is the existence of large markets for manufactured products. Either because of their exceptional size (as in the case of Brazil) or because they specialized in the manufacture of exports (as in the case of Korea, Hong Kong, or Singapore), the successful countries tended to have access to larger markets. In the first case, they had little incentive to maintain few firms; in the second, they lacked the power to exclude competitors. Large markets therefore promoted conditions under which efficient operations became an established part of the economic order.

In Africa, few nations attempt to export manufactured products. Most have small populations and the majority of their citizens are poor. Of all the nations considered in this study, only Nigeria offers a market of sufficient size and wealth to engender competitive struggles between a large number of firms. For most others, the present industrial order could be not a prelude to growth but a framework for economic stagnation.