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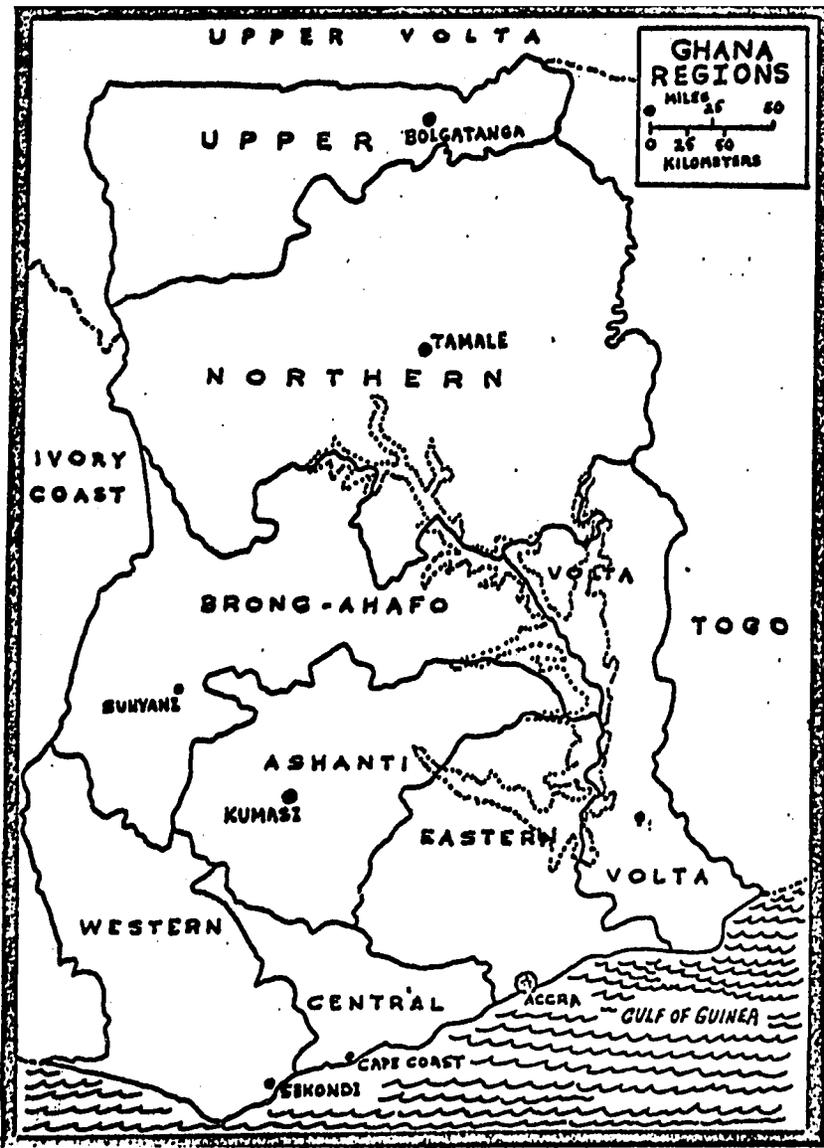
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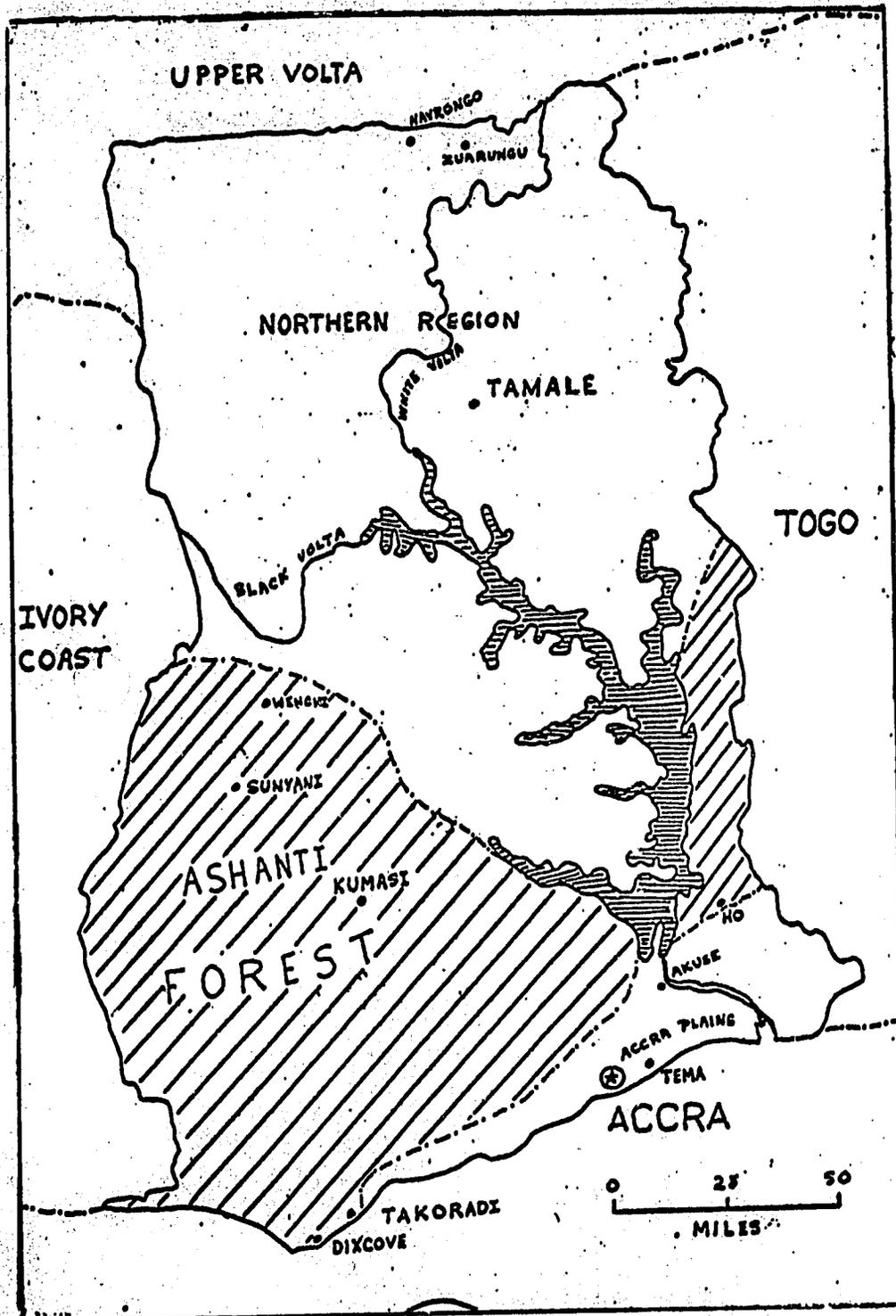
All views, interpretations, recommendations and conclusions expressed in this paper are those of the author and not necessarily those of the supporting or cooperating organizations.

ABBREVIATIONS

Where an agency is referred to only one or two times, its name is written out in the text. In those instances where it is mentioned repeatedly, initials may be used. Reference to this list of abbreviations may be useful:

ADC:	Agricultural Development Corporation
CFAO:	Compagnie Française de l'Afrique Occidentale
CMB:	Cocoa Marketing Board
CPC:	Cocoa Purchasing Company
FAO:	Food and Agricultural Organization (United Nations)
UGFCC:	United Ghana Farmers Cooperative Council
UAC:	United African Company (subsidiary of Unilever)





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Marvin P. Miracle and Ann Seidman*

INTRODUCTION

Ghana's first national government, which took office in 1951, repeatedly declared that greater agricultural output was essential to the attainment of its extensive development plans. The first tropical African country to gain full political independence in the post-World War II period (in 1957), Ghana had long been regarded as one of the most prosperous in the region.¹ Its eight million inhabitants are heavily dependent on agriculture, as are all tropical African countries. About 60 percent of the labor force is engaged in agricultural activities.² Manufacturing produced only about

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¹No precise ranking of the degree of development of African countries is possible, but non-monetary indicators substantiate this judgment: cf. W.O. Jones and C. Mérat, "Consumption of Exotic Consumer Goods as an Indicator of Economic Achievement in Ten Countries of Tropical Africa," Food Research Institute Study, February, 1962; and Marvin P. Miracle, Maize in Tropical Africa, Madison, Wisconsin, 1966, Table 2-1, pp. 27-28.

²The Economy of Ghana, Vol. 1 of A Study of Contemporary Ghana, W. Birmingham, I. Neustadt, and E.N. Omaboe, eds., London, 1966, p. 25.

two percent of gross domestic product in 1961.³

Starchy staples (mainly manioc, maize, yams, plantain, taro, millets and sorghums, and rice) account for over 80 percent of the caloric intake of the average Ghanaian.⁴ But although inadequacies of global statistical data severely limit quantitative analyses of changes in foodstuff output, fairly reliable data is available for cocoa, which constitutes about two-thirds of Ghana's exports. Cocoa exports increased about 70 percent in the postwar years. However, because of the fall of cocoa prices due to supply outpacing demand on the world market, foreign exchange earned by cocoa remained about the same.⁵

In 1961, faced with development expenditures expanding faster than export earnings, the Ghana government imposed import restrictions. By 1965, lack of imported raw materials severely hampered agricultural as well as industrial output and rising foodstuff prices constituted a major factor in mounting urban discontent,⁶ which many observers consider a major cause of the fall of Nkrumah in the coup of February, 1966.

³R. Szereszewski, "Sectoral Structure of the Economy," The Economy of Ghana, op. cit., Table 3:2, p. 68.

⁴See Miracle, op. cit., p. 120; and B.F. Johnston, The Staple Food Economies of Western Tropical Africa, Stanford, 1958, p. 200.

⁵See Appendix I. Ghana's expansion of cocoa production was impressive over the period. From an average of 241 thousand metric tons exported in the 1948-1952 period, exports increased by 70 percent by 1962-1964 (FAO, Production Yearbook and Trade Yearbook, various issues). The contribution of this growth of cocoa production to economic development is questionable. Firstly, largely because of lack of research on the development plans of other cocoa producers (particularly Nigeria, the Ivory Coast, and Brazil), a world cocoa surplus developed toward the end of the period and declines in cocoa prices largely offset Ghana's output increments. Secondly, expansion of cocoa production appears to have been achieved mainly through new acreage rather than through increases in productivity.

⁶Ghana, Economic Survey, 1965, Accra, 1966, pp. 76, 101.

A comprehensive analysis of Ghana's 1951-1965 agricultural development program would require examination of the wide range of changes made in the inherited political-economic institutional structure. This structure stemmed from the post-Independence effort to attain higher levels of living for the entire population.⁷ This paper seeks to achieve a more limited objective: that of evaluating the Ghana government's efforts during the period 1951 to 1965 to establish cooperatives and quasi-cooperatives as a means of increasing productivity and improving the marketing of farm products.⁸

BACKGROUND

The record of cooperatives has been relatively poor in most underdeveloped areas. Nowhere does it appear less adequate than in tropical Africa, although as yet only fragmentary research has been done on African cooperatives. In Ghana, cooperatives have long been viewed as a promising institutional reform. As early as 1938, writers in the Gold Coast Farmer, then the leading agricultural journal in the country, stated: "...there is reason to believe...that the African peasant farmer would take more readily to cooperative production than his European counterpart."⁹ Those aspects of agriculture which require capital machinery and equipment could best be developed on a cooperative basis, according to this line of argument; otherwise individual farmers will remain at the "mercy of the factory owner."¹⁰

⁷See A. Seidman, "Ghana's Development Experience, 1951-1965" (Ph.D. thesis, University of Wisconsin, 1968) for description and evaluation of the over-all development 1951 to 1965 and Marvin Miracle and A. Seidman, "State Farms in Ghana," LTC Paper, No. 43, Land Tenure Center, Madison, Wisconsin, 1968, for detailed analysis of the government's effort to build state farms.

⁸The term "cooperatives" is used here, as it is in most of the literature relating to Ghana, to refer to all types of cooperatives since functions tend to overlap, making precise distinctions and definitions difficult.

⁹Gold Coast Farmer, Vol. VI, published by Director of Agriculture, Accra, 1938, p. 162.

¹⁰Ibid.

It has been argued by some that certain features of traditional Ghanaian agriculture favor organizing production along cooperative lines. The existence of extensive, communally-owned oil palm stands in Ghana has been presented as an example of the possibility of cooperative ownership of oil presses and marketing in that crop. Similarly, cooperation in other areas is seen as facilitating specialization and increased productivity in crop production as well as processing.

In 1959, this argument was reiterated in a report on cooperatives in Ghana:¹¹

The Ghana farmer still relies on his cutlass and hoe, and in some cases, the fire, as the prime agricultural implements, and makes up for deficiencies in man-power through pooling his labor and that of his wife and children with that of his friends as a means of eking out the efforts of hired labor at peak periods on the farm. This is a form of co-operative association as old as African society itself.¹²

¹¹Report of the Registrar of Co-operative Societies for the period July 1, 1959--June 30, 1960, Ministry of Information, Government Printing Department, Accra, 1961, p. 7.

¹²The reference to hired labor here suggests that the author of the quotation is aware that the traditional communal farming in Ghana had by 1959 shifted to capitalist production methods in some areas, particularly cocoa farming.

Land tenure varies from tribe to tribe in Ghana. Prior to the extensive development of cocoa as a cash crop, land generally could not be bought and sold anywhere. Traditionally, rights to till land are allocated by some tribal authority--usually the chief, tribal elders, or a lineage head--and last only as long as land is in cultivation. Shifting cultivation, a system of utilizing long bush or forest fallow to periodically restore soil fertility, is generally practiced with annual crops. Once land is abandoned for renewal of soil fertility, rights to cultivate it may be re-allocated.

With the introduction of tree crops such as cocoa or rubber, the traditional system of communal land tenure has given way to de facto private ownership of land for several reasons. Soil fertility does not decline enough to warrant a long forest fallow between crops. Cocoa became a valuable cash crop; the trees constituted capital created by the farmers and came to be identified with the land on which they stood. (Innumerable legal suits attest, however, to the lack of clarity in the transition from traditional to private property rights.)

On the other hand, some doubts have been recorded. S. La Anyane argues that cooperative agricultural production cannot succeed in Ghana, although marketing and provision of services--such as irrigation, storage facilities, processing, and marketing--may be provided through cooperation.¹³ Cocoa farmers, in particular, it has been said, will not join producers' cooperatives; the landowners have long since been outside communal use of land and like to own and operate lands on their own.¹⁴

Whether incentives and inputs needed to increase productivity in Africa can best be provided by individual entrepreneurs, by farmers joining together in cooperatives, by state farms, or yet other ways of organizing resources remains at issue. Evaluation of the Ghana government's efforts to build both producer and marketing cooperatives may shed some light on this controversy.

This paper will first present a brief history of the cooperative movement up to 1961; second, a summary will be given of the institutional changes introduced when the United Ghana Farmers Cooperative Council became the sole licensed buying agent for the Cocoa Marketing Board and responsible for all agricultural cooperatives; and, third, an evaluation of the relative successes and problems of cooperatives throughout the period is attempted.

COOPERATIVES IN GHANA PRIOR TO 1961

EARLY COOPERATIVES

The British fostered cooperatives throughout West Africa with a view to ensuring improvement of the quality of

¹³ Interview, S. La Anyane, 26/4/66.

¹⁴ Some 35 of A. Seidman's students at the University of Ghana had been social workers for five to 20 years, working with self-help projects in the villages. In a heated debate on cooperatives, it emerged that those who had worked in the savannah areas found the farmers more willing to participate in cooperatives than those who lived in the cocoa belt. The latter had for a long time been involved in cash crop production.

peasant-produced crops.¹⁵ In 1929, C. Auchinleck, Director of Agriculture, conceived the idea of starting a cooperative movement in the Gold Coast,¹⁶ the future of which he contended was inextricably linked to agriculture:

I do not believe the vision to be a fanciful one, of a peasant-state the whole wealth and finances of which would rest soundly and stably on a system of Co-operative Societies. Denmark is such a state, and it should be possible to found one in the Gold Coast.¹⁷

Auchinleck argued that the local farmers already tended to form "communal associations," and that the greater part of agricultural wealth springs from the export of cocoa, which has enabled cocoa farmers to accumulate large sums of money annually and requires a "reputable system of village finance."¹⁸

¹⁵Ghana's cocoa rapidly expanded in the world market from 1890 to the early twentieth century because peasant production, with little or no overhead, could easily outsell Brazilian cocoa which was produced on large plantations. Part of Ghana's cost advantage in cocoa derives from the fact that her cocoa harvest coincides with the dry season, hence the cocoa harvest can be sun-dried and little or no capital is required to dry the crop. In the cocoa zone of Brazil, harvest comes during the rainy season, and drying sheds or stoves must be employed to dry the harvested cocoa beans. But despite a cost advantage, the problem of ensuring high grade quality in Ghana persisted and was in fact overcome only by the national government working together with the Cocoa Marketing Board and the farmers' cooperatives.

¹⁶The Gold Coast gained independence from the British in 1957 and at that time adopted the name "Ghana." Upon attaining independence, Ghana established its own central bank and currency. Prior to 1958, it used British pounds sterling (£), but after 1958, it used Ghanaian pounds (£G) which were established at par with the British £. Therefore, money prices are given throughout this paper in £ which remained on par with the British throughout the period.

¹⁷Gold Coast--Annual Report of the Registrar of Co-operative Societies, 1954-55, Ministry of Information, Government Printing Department, Accra, 1956.

¹⁸Ibid.

The first cooperatives were for cocoa marketing and were started about 1928, when the Department of Agriculture began to encourage formation of cooperatives by loans of scales and other equipment. Initially, all accounting and secretarial work was done by junior officers of the Department of Agriculture.¹⁹ Cooperatives grew rapidly in number but had little impact on marketing. Although nearly 400 cooperatives had been formed by 1934, they handled less than two percent of the cocoa crop.²⁰

In 1937, an alliance of Gold Coast cooperatives was formed under a cooperative ordinance modeled along the lines of those in Nigeria and Tanganyika, which centralized power in the hands of the colonial administrators. The registrar had the power to register, supervise, inspect, audit, and liquidate member cooperatives. The Gold Coast Alliance joined the International Cooperative Alliance, which had its headquarters in London.²¹ The main aim of the Alliance was to improve quality of cocoa and encourage increased output by obtaining a better price for the farmer. After the 1938 cocoa hold-up,²² however, the cooperative societies were

¹⁹Sheila Gorst, Co-operative Organization in Tropical Countries, London, 1959, pp. 111-112.

²⁰Ibid., p. 112.

²¹National Investment Bank, Cooperatives, A Report by Development Service Institute (Accra: 1964).

²²The cocoa boycott or "hold-up," as it came to be called, originated as a protest by the Gold Coast cocoa farmers against a price-fixing agreement between 12 of the 13 European firms which purchased 98 percent of the crop (only the English and Scottish Joint Co-operative Wholesale Society Ltd. did not join). Under the four-year agreement, a common price was to be offered and a proportionate tonnage, based on previous performance, was allocated to each firm. The hold-up lasted from October 1937 to April 1938, during which time only 48,487 long tons of cocoa were exported, compared with 213,592 long tons during the same period of the preceding year. When a truce was finally negotiated, 30 percent of the cocoa crop was of less than grade one quality, partly due to inadequate storage. The government-appointed Nowell Commission drafted a scheme under which a Cocoa Farmers' Association was to be formed to represent all cocoa farmers in southern Ghana and Ashanti, and the cooperative movement was to be developed alongside of the existing marketing organizations. (See S. La Anyane, op. cit., pp. 102, 104-8.)

able to do little for their members. The war led to the imposition of controls and quotas. The cooperatives were permitted to become only "B" shippers, selling their produce to "A" shippers (the large British trading firms with offices in overseas cocoa markets), but their quotas were too small to permit them to accumulate appreciable bonuses.²³

One significant cooperative development during the war was the creation of a yam producers' society in Attabubu in Northern Ashanti.²⁴ Apparently this cooperative flourished primarily by marketing its members' surplus yam output under contract to the army; the cooperative disintegrated rapidly when the contracts terminated at the war's end.²⁵

In 1944, as cocoa prices began to improve, the farmers were stimulated to expand production and participate in cooperatives. That year, a Department of Cooperation was formed to take over the administration of cooperatives from the Department of Agriculture. Many of the functions previously performed by the Department of Agriculture were transferred to the societies themselves, including bookkeeping, custody of cash, and management. An apex society, the Gold Coast Co-operative Federation, was formed to control and guide the societies through district unions, to act as their agent in the general conduct of their business, and to promote cooperatives throughout the country. The produce marketing societies--mainly cocoa marketers--conducted 90 percent of the cooperatives'

²³Report of the Registrar of Co-operative Societies, 1944-45,
Accra: Ministry of Information, 1946, p. 1.

²⁴Yams are produced chiefly in the middle and northern areas of Ghana and marketed in the cocoa zone of the south, where there is not only an urban demand but a large demand by farmers who have partly specialized in growing cocoa, palm oil, or some starchy staple other than yams. (See Marvin P. Miracle, Maize in Tropical Africa, p. 62, for inter-regional trade in yams recorded during the 1957-58 traffic census.)

²⁵Report of the Registrar of Co-operative Societies, 1953-54,
Accra: Ministry of Information, 1955, p. 2.

business. The British administrator of cooperatives commented:

In a country in which agriculture is destined always to remain the most important industry, and under such a mentor, it is not surprising that produce marketing societies have until recent years almost exclusively dominated the scene.²⁶

The number of cooperatives had declined sharply compared with the early 1930's. As a result of failures and amalgamations, cocoa cooperatives had been reduced from 400 to 150 by 1945. The share of the cocoa crop marketed had grown slightly--from two to seven percent--but was still only a small proportion of the total.²⁷ Over the same period, 24 other societies had been formed in commodities other than cocoa, to take advantage of war-time contracts for such things as yams, mentioned earlier, and timber. However, most of these failed ultimately. Termination of war contracts and bad management "ruined most of them within a few years."²⁸

In 1948, the British colonial administration encouraged the establishment of consumer cooperatives and a wholesale establishment in an effort to introduce competition for the large foreign trading firms and reduce consumer goods prices, which had touched off nationalist riots.²⁹ The Department of Agriculture argued that rising cocoa producer prices augmented demand and led to rising prices for local foodstuffs and imported goods for all Gold Coast citizens.³⁰ The efforts to build a consumer cooperative movement

²⁶ Report of the Registrar of Co-operative Societies, 1951-52, p. 2.

²⁷ Gorst, op. cit. p. 114.

²⁸ ibid.

²⁹ For discussion of collusion among importing firms see P.T. Bauer, "Concentration in Tropical Trade: Some Aspects of Oligopoly," Economica, Vol. 30, No. 120, November 1953, pp. 302-321.

³⁰ Report of the Registrar of Co-operative Societies, 1951-52, p. 1; see also Report of 1955-56.

dwindled to nothing in the early fifties, however, primarily for two reasons: 1) consumer cooperatives with store buildings and salaried personnel could not compete with goods which passed "through importing firms into the hands of tens of thousands of women pavement traders with no overheads;"³¹ 2) as a result of lack of technically trained staff, corruption dogged the movement from the outset ("...the few persons who have some real background in trade in the Gold Coast tend to be heavily involved in its ramifications and the services of such persons have very obvious drawbacks."³²)

The first head of the cooperative wholesale establishment was a former president of the Gold Coast Merchant's Association with a "record of successful independent business," but the establishment lost money every year of its operation. Three employees were dismissed. The 1951-52 annual report on cooperatives commented that the wholesale establishment for the consumer cooperative movement appeared to have a staff with a "personal motive in keeping the day to day position of the business obscure."³³

At the end of the 1951-52 period, just after the national government assumed power, the primary produce societies, which remained the predominant feature of the cooperative movement, had accumulated capital and reserves totalling some £ 55,000, which was invested mainly in "valuable premises" in Accra and Kumasi, and a fleet of trucks for transport which distributed cash and collected a limited share of the members' produce, almost entirely cocoa.³⁴

The problems reported to plague the cooperative movement in the early days were harbingers of difficulties to be encountered later: lack of education and able, dedicated committee members; a "tendency to exalt the individual and to shape things in a form that

³¹ Report of the Registrar of Co-operative Societies, 1953-54,
p. 2.

³² Report of the Registrar of Co-operative Societies, 1950-51, p.3.

³³ Report of the Registrar of Co-operative Societies, 1951-52.

³⁴ Ibid.

lends itself to direction from above without necessarily consultation from below," partly as the "price of haste" where the organization has been built from the top down, manifesting itself in "a situation of a few officers at the center trying to run the Primaries--instead of the reverse...."³⁵ The Cooperative Annual Report of 1951-52 declares:

Although there are many indigenous customs of a communal nature, it is fair to say that the idea of a formal cooperative association, for common economic ends and under the Rochdale principles, is an innovation. The family tie which means so much in the Gold Coast, springs from other sources, and in any case is fast yielding under the stress of material progress and widening horizons.³⁶

The new national government incorporated the Department of Cooperatives into the Ministry of Education and Social Welfare, seeking to foster voluntary cooperation based on democratic principles designed to further the members' common economic ends along the lines of cooperatives in the United Kingdom.³⁷ The functions of the Cooperative Department continued to be: 1) to educate people about cooperatives; 2) to carry out prior economic surveys of proposed business propositions; 3) to inspect and guide member societies. The ultimate goal was declared to be to "gradually revert to the mere informality of a Registrar's Office...a long way away."³⁸

By 1953-54, the cooperative Department consisted of three central organizations: banking, produce and marketing, and supplies. It functioned on a territorial basis with three strategic centers

³⁵ Report of the Registrar of Co-operative Societies, 1951-52, p.1.

³⁶ Ibid.

³⁷ Ibid.; and Report of the Registrar of Co-operative Societies, 1953-54, p. 1.

³⁸ Report of the Registrar of Co-operative Societies, 1953-54, p. 1.

In Kumasi, Takoradi, and Ho. Its head office was in Accra. Ten cooperative officers were in charge of the main section's work in the three union areas in Ashanti, Trans-Volta, Togoland, and the Northern Territories. These were assisted by 11 senior cooperative assistants and 24 cooperative assistants who carried out all the functions of inspection, surveys, and providing advice. A second section consisting of four senior officers and nine picked junior officers carried out the formal audit of all member societies and compiled statistics for record purposes. The third section, which provided coordination and specialized knowledge for all production and marketing, banking and thrift, and consumer cooperatives, consisted of three senior officers and 13 junior staff members. The government had allocated some £ 5 million to cooperatives through the cooperative bank and for administrative expenses.³⁹ Cooperative Department officials reported they felt some conflict had emerged between the Cooperative Department's role in providing education and advice to foster a voluntary cooperative movement, and its function as a supervisor to see that the government funds "do not go astray."⁴⁰

COOPERATIVE COCOA MARKETING

The major development of the cooperative movement up to the early 1950's remained in the cocoa belt. It served two primary purposes: to market cocoa and to provide loans to the farmers.

Upgrading of the Gold Coast Co-operative Federation from "B" to "A" shipper status in 1946-47 stimulated participation in cocoa marketing cooperatives. Between 1945 and 1955, the number of cocoa societies was increased from 150 to nearly 350 (with membership increasing about five-fold--from 6,000 to 33,000). Nevertheless, by 1955 they still marketed only 20 percent of the crop.⁴¹ Thus after World War II, the major share of Ghana's cocoa continued to be purchased by large foreign trading firms licensed by the Cocoa Marketing Board (CMB). These firms usually had headquarters in Accra, with district managers and sub-district agents and a system of

³⁹ Ibid.

⁴⁰ Report of the Registrar of Co-operative Societies, 1952-53,
p. 1.

⁴¹ Gorst, op. cit., p. 115.

buying stations serviced by clerks throughout the country. They laid out the capital for a storage area with a capacity of 1,000 long tons where the cocoa could be bagged and stored; lorries to bring the cocoa in from the distant farms; scales for weighing the crops; and implements for handling the cocoa.⁴² They generally established central servicing depots for trucks in Kumasi and Accra. They graded and checked the cocoa at the stations. They financed the cocoa, often in advance, so that there gradually evolved "a complex and generally undesirable system of advances to farmers and brokers."⁴³

In 1952, 28 firms, of which 14 were African, received buying licenses from the Cocoa Marketing Board.⁴⁴ The smaller African buying agents were reported to be "experiencing difficulties in establishing connections." A typical African buying agent, J.A. Adarquah of Nsawam, was himself a cocoa farmer. He owned, in addition to his own farms, a 100-ton cocoa shed, and handled about 319 long tons of cocoa each season, employing his own agents and sub-buyers who received commissions. He had been buying for foreign shipping companies since 1915, but had become a licensed buying agent on his own account only in 1952.⁴⁵

Next to the United African Company (UAC) and Cadbury's, the Cooperative Marketing Association had, by 1950, become the third largest buying agent.⁴⁶ It was reported to have "reached a stage in which it is operating more cheaply than could any system of private enterprise or public corporation," with an impressive ring of stores and storage sheds in many villages. It also had a coffee hulling machine and a rice huller, while limes were marketed to a local factory. Two member societies produced "European vegetables" and were said to "eke out a somewhat precarious existence."⁴⁷

⁴² Cocoa Marketing Board News, Jan. 1957, No. 3.

⁴³ Ibid., p. 7.

⁴⁴ Gold Coast Cocoa Marketing Board; Fifth Annual Report and Accounts for Year Ended 30th Sept., 1952, Accra, p. 4.

⁴⁵ Ghana Cocoa Marketing Board, Eleventh Annual Report and Accounts for Year Ended July 1959, Accra, pp. 17-18.

⁴⁶ Report of the Registrar of Co-operative Societies, 1949-50,
p. 1.

⁴⁷ Report of the Registrar of Co-operative Societies, 1950-51,
p. 3.

In Ashanti, the heart of the cocoa belt, the share of cocoa marketed cooperatively rose rapidly from 14 percent in 1949-50 to 25 percent in 1953-54. The registrar reported cooperative expansion was tending to outstrip the capacity to handle the produce and supervise operations. Membership multiplied from 3,000 to 16,000, which was taken as an indication that the farmers were "breaking through the screen of brokers at varying levels."⁴⁸

By 1953-54, the Gold Coast Cooperative Marketing Association, the apex body of the Cocoa Marketing Coops, had become the first buying agent of the CMB with 40,388 long tons of sales (a fifth of the crop), valued at £ 5,428,088. The registrar commented that this was a "great achievement in view of the strong competition given by the Cocoa Purchasing Company (CPC)-- a subsidiary body of the Cocoa Marketing Board."⁴⁹ The CPC granted long-term advances which swayed would-be cooperators in the opposite direction, since the Association could not afford to support long-term loans.⁵⁰

The Marketing Association received the same remuneration as other cocoa buying agents. It deducted its expenses and a small amount for reserves and passed the rest on to the district unions which, after deducting their expenses, passed the remainder to the primaries. The primaries were, in some instances, able to pay a patronage bonus to their members of 2s/6d a head-load (60 lbs.)⁵¹

By 1959, cooperatives had taken over the marketing of 40 percent of the total cocoa crop. UAC withdrew from cocoa buying. This left two channels of cooperative marketing: 1) the Ghana Farmers Marketing Cooperatives, headed by Martin Appiah-Danquah, which purchased 46,983 long tons, retained £ 3 and repaid £ 5

⁴⁸ Report of the Registrar of Co-operative Societies, 1953-54, p. 3.

⁴⁹ Ibid., p. 2.

⁵⁰ Ibid., p. 3. Both the Gold Coast Marketing Association and the Cocoa Purchasing Company appear to have loaned funds primarily to middle and large-sized cocoa farmers, suggesting that they catered primarily to them rather than to the larger numbers of small farmers. (Office of the Government Statistician, Survey of Cocoa Producing Families in Ashanti, 1956-57, Government Printing Office, Accra, 1960, pp. 20, 72; and Survey of Population and Budgets of Cocoa Producing Families in the Oda-Swedru-Asamankese Area, 1955-56, Government Printing Office, Accra, 1958, pp. 29ff, 42.)

⁵¹ Report of the Registrar of Co-operative Societies, 1956-57.

per long ton to local branches which went to individual members as a bonus; 2) the Ghana Cooperative Marketing Association, which purchased 73,675 long tons, returning £ 6/10s per ton to member unions, which in turn granted varying sums to primaries and members, depending on which district they were situated in.⁵²

CREDIT IN THE COCOA BELT

The need for agricultural credit grew up along with, and as an integral aspect of, the small-scale capitalist cocoa farming system which produced Ghana's major export crop. A series of surveys made in the 1950's indicated that it was not uncommon for as many as 75 percent of the cocoa farmers in an area to have borrowed money from local money lenders. Some of this was used for expanding farms; a fairly high proportion was used for building homes or for expenses connected with sickness or death.⁵³ Farmers could sometimes obtain advances from the trading company representatives. These advances were repaid with the proceeds from harvested crops; sometimes farmers kept only a third of the crop for themselves until the debt was paid off. Total repayments often were more than twice the original sum borrowed, and occasionally five times as much.⁵⁴

The colonial government had established a cooperative bank in 1946 which provided funds to member societies, enabling them to extend less expensive credit to farmers. In 1951, the national government provided a £ 1.5 million guarantee for the bank's operations. The bank guaranteed loans from the commercial banks to the member societies and, through them, to the farmers. Thus it functioned essentially as a midway house for credits from the commercial banks. The Cocoa Marketing Board provided another £ 100,000 for loans for the redemption of society members' farms

⁵²Report of the Registrar of Co-operative Societies, 1960, p. 7.

⁵³Cocoa Research Series, economic surveys carried out in 1955-56 by P. Hill and C. McGlade, University College of Ghana (mimeographed), Nos. 1-13.

⁵⁴Ibid., e.g. No. 2, p. 8-9.

from money lenders. Interest rates charged to the farmers were three to six percent, depending on circumstances, and repayments were deducted automatically from cocoa payments at the union level.⁵⁵

The amount of credit available through the cooperatives mounted rapidly in the 1950's. However, the problem of recovering loans from the farmers became increasingly serious.⁵⁶

	Loans Issued	Loans Recovered	Loans Outstanding
1945-46	£11,444	£10,991	£2,616
1946-47	15,566	16,261	1,921
1947-48	32,991	30,629	4,025
1948-49	60,013	62,257	7,781
1949-50	86,940	77,287	17,812
1950-51	110,626	107,774	20,664
1951-52	210,040	191,137	45,567
1952-53	294,166	269,635	70,098
1953-54	455,502	405,123	120,476
1954-55	526,037	413,138	253,375
1955-56	470,875	413,671	290,579

By the end of the 1950's, the Ghana Cocoa Marketing Board had loaned £ 600,000 to the cooperative bank to provide interest-free loans to the Ghana Cocoa Farmers Marketing Cooperatives and the Ghana Cooperative Marketing Association. Only the Ghana Cooperative Marketing Association was reported to have honored its obligation in full by the end of the 1960 cocoa season. The Ghana Farmers Marketing Cooperative, claiming to have funds tied up in unshipped cocoa and outstanding advances to customers, defaulted on £ 300,000 worth of loans.⁵⁷

The cooperative movement also fostered thrift societies. By 1962, there were 62 of these societies with members totalling 2,514 and savings totalling £ 17,131.⁵⁸

⁵⁵Reports of the Registrar of Co-operative Societies, 1951-52, 1952-53.

⁵⁶Report of the Registrar of Co-operative Societies, 1955-56,
p. 1.

⁵⁷Report of the Registrar of Co-operative Societies, 1960, p. 8.

⁵⁸Ibid., p. 7.

THE COCOA PURCHASING COMPANY

In 1952, the Cocoa Marketing Board appointed the Cocoa Purchasing Company, mentioned earlier, and contributed from its reserves an authorized capital of £ 200,000, hoping to "enable the farmers to invest their savings locally and to take part in the control of the Company." Allowances usually paid to middlemen were to go to farmers and farmers' groups who sold directly to the Company.⁵⁹

Apparently the cooperative administrators resented this new organization from the outset. Their 1952-53 Annual Report described the CMB as being "in possession of huge surpluses gained from trading in crops and upon which co-operative interests are not represented, although about one tenth of these monies has been accumulated by sale of cooperative cocoa"; yet this organization was to issue loans exclusively through a subsidiary formed by the Directors. The report expressed fears that the CPC might be more lax and do damage to the cooperative practice requiring mutual responsibility of members of local societies for losses incurred.⁶⁰

In 1953, the Cocoa Marketing Board increased its investment in the CPC to £ 700,000 in accord with a government decision to wind up the affairs of the Agricultural Loans Board and invite the Cocoa Marketing Board to provide loans to cocoa farmers through "suitable agencies."⁶¹

In the first year of its operations, the CPC became the fifth largest buyer in the list of CMB cocoa buying agents, purchasing 13,995 long tons. The following year, it moved up into third in the rank of buying agents, buying 37,306 long tons.⁶² It had become

⁵⁹Gold Coast Cocoa Marketing Board, Fifth Annual Report, 1952, p. 5.

⁶⁰Report of the Registrar of Co-operative Societies, 1952-53, p. 2.

⁶¹Gold Coast Cocoa Marketing Board, Sixth Annual Report, 1953, p. 3.

⁶²Gold Coast Cocoa Marketing Board, Seventh Annual Report, 1954, p. 5.

the second most important buying agent by 1955, purchasing 40,992 long tons.⁶³ By 1956, the CPC employed a staff of 700 for its produce and loan operations, excluding receivers who were paid on a commission basis and who numbered about 1,800. The company operated 38 districts which administered 1,960 buying centers.⁶⁴

Complaints about the functioning of the company had become so prevalent by 1955, however, that the government appointed an investigation Commission headed by a Nigerian, Justice Jibowu. The most damning evidence appeared to be the auditors' reports which explained that, despite its expanding business, the company was losing money in ways inadequately accounted for. For example, the CPC was authorized to pay commissions to farmers and receivers. The results for the first three years are set out below:⁶⁵

	Commissions paid to farmers and receivers	Profit or (loss) (as shown by accounts)
1952-53	£48,169	£275
1953-54	116,811	10,272
1954-55	157,310	(27,024)

Why the company should suddenly start to lose such large sums was unexplained. Also, substantial funds, which were not accounted for, had apparently been transferred to the Loans Agency accounts. Certificates of cash in hand at 30th September 1955 from supervisors at certain out-stations had not been produced for the accountants.⁶⁶

Besides these certificates, amounting to £ 6,992/3s/5d, there seemed to be considerable evidence to suggest: 1) that the CPC was being used to gain political ends--to build support for the governing Convention Peoples Party--e.g., that only members of the United Ghana Farmers Council, established with Convention Peoples Party support and whose Secretary General sat on the Cocoa Purchasing Company

⁶³Gold Coast Marketing Board, Eighth Annual Report, 1955, p. 7.

⁶⁴Committee on Purchasing Cocoa from the Farmers, Prof. J. de Graft-Johnson, Chairman, Meeting with Economics Department, University of Ghana, June 25, 1966. (Hereafter cited as Cocoa Committee)

⁶⁵Report of the Commission of Enquiry into the Affairs of the Cocoa Purchasing Company Limited, (Accra: Government Printer, 1956), p. 25.

⁶⁶ibid. passim.

Board, were permitted to receive loans;⁶⁷ 2) that loans not infrequently exceeded the authorized £ 1,500--several were more than £ 3,000--and were frequently not repaid; 3) that of some 500 loan dockets examined out of over 15,000 loans granted, most contained some irregularities; 4) that the Managing Director of the CPC, A.Y.K. Djin, utilized its facilities and finances to advance his private business.⁶⁸

As a result of the investigation's outcome, the government cancelled the Cocoa Marketing Board's power to issue loans through either the CPC or the Cooperative Marketing Association.⁶⁹ The following year, the CPC was liquidated. The Cocoa Marketing Board lost outright £ 800,000 out of the £ 1,200,000 capital it had invested in the CPC.⁷⁰ The CMB established a loans agency as a department of the Board with the main goal of collecting the £ 1,552,453 in bad or doubtful loans outstanding.⁷¹

NON-COCOA COOPERATIVES

The Agricultural Department, the Social Welfare Department and, to a lesser degree, the Agricultural Development Corporation worked throughout the 1950's with groups of farmers to establish cooperatives

⁶⁷It was also claimed that the opposition was receiving funds from Cadbury's for loans to farmers with a similar object in view.

⁶⁸A.Y.K. Djin, a member of the United Ghana Farmers Council, had formerly been chairman of the Convention Peoples Party Finance Committee. This criticism of his operations and his subsequent removal from post of CPC chairman apparently did not disqualify him from future public posts. In 1965, he was Minister of Trade responsible for cocoa marketing as well as all internal trade. (Cocoa Marketing Board News, No. 29, May 1965); see also Austin, Politics in Ghana, p. 65.

⁶⁹Gold Coast Cocoa Marketing Board, Ninth Annual Report, 1956, p. 8.

⁷⁰Ghana Cocoa Marketing Board, Thirteenth Annual Report, 1960, p. 5.

⁷¹Gold Coast Cocoa Marketing Board, Tenth Annual Report, 1957, pp. 6-7.

for other crops, both for export and to meet the local demand for foodstuffs. The Agricultural Development Corporation, established by the British after the war, was, throughout its existence, primarily concerned with establishing estate farms.⁷²

The Agricultural Development Corporation did establish an agricultural machinery hire-purchase scheme. By 1958, it reportedly had 27 pieces of equipment--including a palm kernel cracker, a corn mill unit, and a palm oil presser--available for use by farmer cooperatives. The farmers were to pay 20 percent down and the remainder, after a six-month moratorium, over a two-year period.⁷³

The Agricultural Department extension workers, working with Social Welfare Department personnel, carried the burden of organizing cooperatives outside cocoa marketing. For export crops, the cooperatives were mostly designed to facilitate marketing in competition with the large private firms--particularly UAC and CFAO. The actual production of coffee, bananas, and palm kernels continued to be carried out primarily by individual farmers and their families, as it had been with cocoa. The Cocoa Marketing Board (in some years called the Agricultural Marketing Board) appointed the buying agents and established a producer price for these items, just as it did for cocoa.

Marketing Board Purchases Other Than Cocoa, 1955-65⁷⁴

Crop Year	Palm	Copra (long tons)	Coffee (long tons)	Shea	Bananas (bunches)*
	Kernels (long tons)			Nuts (long tons)	
1955	9,442	3,330	12,296	725	48,796
1956	11,452	4,627	746	611	51,759
1957	7,079	3,476	435	576	64,411
1958	8,478	3,489	518	1,775	118,474
1959	2,514	3,454	1,805	3,004	117,782
1960	2,974	3,000	2,194	1,356	309,366
1961	1,500	2,419	3,446	3,754	235,695
1962	857	3,487	1,932	614	132,812
1963					
1964	881	3,821	2,092	6,634	141,479
1965	1,148	3,822	6,549	2,933	89,103

*Average weight per bunch not specified.

⁷²These are discussed in "State Farms in Ghana," by the same authors, op. cit.

⁷³Ghana Agricultural Development Corporation, Third Report and Accounts for Period ended 30th June, 1958.

⁷⁴Data from the files of the Ghana Planning Commission.

By 1956, the cooperative marketing societies were marketing to the CMB not only cocoa, but also copra (1,000 long tons), palm kernels (2,099 long tons), and coffee (91 long tons).⁷⁵

Morley, the British managing director of the Agricultural Marketing Board, argued in 1953 that it was debatable whether offering higher producer prices would stimulate increased production; he held that available statistics "do nothing to support this view."⁷⁶ There is considerable evidence to suggest that his view was incorrect, however, as those seeking to build cooperatives to market palm produce to the Cocoa Marketing Board discovered. Cocoa output nearly doubled from 1955 to 1965 in Ghana, while sales of palm kernels to the CMB declined to about ten percent of the 1955 level. The farmer produces palm kernels as he does any cash crop, only when it is profitable compared to other crops.⁷⁷ In terms of actual expected cash returns, the producer price for cocoa was more favorable than that for palm kernels⁷⁸ in the early 1950's--the period when the farmers would have had to plant trees to have them producing in the late 1950's and early 1960's.⁷⁹ As a result, apparently, palm plantings were not extended, and even crops on existing trees were not always harvested. Those farmers who did harvest palm kernels were reported to have reduced their sales via marketing cooperatives to the Cocoa Marketing Board because they obtained more attractive sums by "illicit" sale of their produce to local petty oil extractors for higher prices.⁸⁰

The Agricultural Development Corporation (ADC) sought to encourage individual farmers to expand production of bananas in the hinterland behind Takoradi. At first, the Elder Dempster shipping line provided too little refrigerated space to ship the bananas produced. This was eventually remedied, but the farmers continued to show apathy to banana production until 1958 although the price per stem had been doubled from 3s/6d to 7s/6d. Therefore, the ADC

⁷⁵Report of the Registrar of Co-operative Societies, 1956-57.

⁷⁶Agricultural Produce Marketing Board, Annual Report and Accounts, 1953, p. 3.

⁷⁷S. La Anyane, "Oil Palm Belt of Ghana," Ghanaian Bulletin of Agricultural Economics, Vol. 1, No. 1, June 1961.

⁷⁸Assuming costs of production for cocoa and oil palms were the same. Research on the costs of producing these crops in Ghana has not yet been done.

⁷⁹Agricultural Development Corporation, Annual Report, 1956.

⁸⁰Report of the Registrar of Co-operative Societies, 1960, p. 7.

established the 250-acre Subri plantation near the railroad. The plantation produced bananas at a considerable loss of 10s per acre, due to relatively heavy labor costs. It also provided seed and a marketing outlet for local farmers, however, and banana sales to the Marketing Board expanded up through 1961-62, after which they fell again.⁸¹

Coffee was another crop grown for export as well as local consumption which the Agricultural Department sought to encourage through establishment of cooperatives. Some farmers in the Volta Region formed the Sefwi-Wiawso cooperative to process 300 long tons of coffee. They used their subscription fees--£ 300--to buy a safe, platform, scale, and drums. They borrowed additional funds --£ 3,930--from the Agricultural Development Corporation to buy a coffee huller, iron sheets, and building materials for storage. The coffee was marketed through the Agricultural Development Corporation until it was liquidated; then it was sold through the United Ghana Farmers Cooperative Council (UGFCC).

By the end of the 1950's, four coffee-growing societies had also been established in Ashanti, but these had no central marketing organization. Three coffee hulling machines and storage sheds were almost completed, two for coffee marketing societies, which also dealt in cocoa, and a third for a society marketing only coffee. The Field Unit of the Social Welfare Department and the Agricultural Extension Service of the Ministry of Agriculture provided technical aid and supervised the work; the members provided labor for construction of the facilities.⁸²

A major limitation on expansion of coffee growing in the 1950's in Ghana, as in other countries, was that of overproduction and stockpiling on the world market.⁸³ Ghana joined the International Coffee Agreement and received a quota of 2,389 long tons (1965) which was well below its production capacity. Whatever was produced above the quota had to be absorbed by expansion of Ghana's own consumption.⁸⁴

⁸¹cf., Agricultural Development Corporation Report, 1958, and S. La Anyane, "The Banana Industry of Ghana," Ghanaian Bulletin of Agricultural Economics, Vol. 1, No. 3.

⁸²Report of the Registrar of Co-operative Societies, 1960, p. 6.

⁸³E.A. Kremont, "Coffee Growing in Ghana," Ghana Farmer, Vol. VII, No. 4, pp. 126-133.

⁸⁴Data from the Ghana Planning Commission.

The Agricultural Ministry encouraged farmers on the northern savannah to join cooperatives to produce peanuts for local consumption and ultimately for export. Traditionally, peanuts have been produced in the north, and the surplus has been shipped south for sale. Local varieties and cultivation produce about 400-420 lbs. per acre. Research has shown that output can be increased about 400 percent by using improved techniques and fertilizer.⁸⁵ Cooperative societies were established in the early 1950's in Kusasi, and later in Navrongo, in the Northern Region. These made loans in kind, such as ploughs or pairs of bullocks, to members who were to repay over three years' time. The Kusasi Society borrowed about £ 2,000 at 5.75 percent interest from the Ghana Cooperative Bank, but the heavy drain on its resources led it to shorten the repayment period from three to two years and to raise the initial installment from £ 1 to £ 6. The Kusasi Society had, by 1960, 1,000 members. It issued seed, loaned bullocks and ploughs, and assisted members in marketing with the support of local government agents. It was able to declare a bonus in 1960 of 5s per bag of rice and 2s per bag of peanuts. The Navrongo Society paid a flat 5s per bag bonus for both. However, marketing outlets were reportedly reduced compared with the previous year. With increased output--26 long tons more peanuts than in the preceding season--a higher proportion of the crop had to be carried forward to the next season and sold at a loss.⁸⁶

The Agricultural Department encouraged development of a few food cooperatives, particularly for rice and maize. Studies have shown that improved varieties of dry paddy rice could lead to an increased output from the average of 905 lbs. per acre to over 2,000 lbs. per acre and, for even newer varieties, to 4,900 lbs. per acre. United Nations Food and Agricultural Organization (FAO) studies show that with use of fertilizer alone output can be increased 182 percent.⁸⁷

The Kusasi and Navrongo societies grew rice as well as peanuts under the scheme outlined above. The Department also tried to establish three cooperative rice schemes in Ashanti, but encountered difficulties:

⁸⁵ ibid.

⁸⁶ Report of the Registrar of Cooperative Societies, 1955-56, and 1960, ibid., p. 12.

⁸⁷ Data from the Ghana Planning Commission.

The difficulty of converting schemes into societies is not a new one to this Department and when such schemes are heavily subsidized, particularly in the form of hidden help such as the use of Departmental personnel in keeping accounting books, free or cheap use of mechanized equipment, the difficulties of ultimately forming self-supporting cooperatives are considerably increased.⁸⁸

The Agricultural Ministry made significant efforts to establish cooperatives for improved production and marketing of maize. In Ghana, as in much of tropical Africa, maize became an increasingly important foodstuff with expanding urbanization and population growth. Maize can be grown throughout the country, but it is mostly grown from about ten to 400 miles inland. Most local maize is white and floury. In Northern Ghana, the variety used is more yellow and flinty. In the postwar period, Ghana has been a net importer of maize, mainly from Togo and Ivory Coast. It reduced its imports, however from 9,528,478 cwts (£ 180,813) in 1951, when its own crop was affected by disease, to 72,688 cwts (£ 35,468) in 1961.⁸⁹

For the most part, maize is grown in Ghana on small plots by traditional methods, using a pointed stick to plant the seed, and using no fertilizers. The output on traditional farms ranges from 400-900 lbs. per acre depending on the soil. On Agricultural Station farms, outputs of 1,200-3,000 lbs. per acre have been achieved.⁹⁰ FAO studies show a 62 percent increase in output can be achieved with fertilizers.⁹¹

Maize has often been grown as a cash crop where cocoa is dying out, as in the Adidwan/Wenchi district. A case study of the Assesewa area⁹² shows that the estimated average value of the capital employed there--cribs, hoes, and cutlasses--was only

⁸⁸Report of the Registrar of Co-operative Societies, 1954-55, p. 3.

⁸⁹W.K. Agle, "The Improvement of Yields of Maize in Ghana," Ghanaian Bulletin of Agricultural Economics, Vol. II, No. 2, June 1962, and Marvin P. Miracle, Maize in Tropical Africa, op. cit., Chs. 9 and 10 and maps, pp. 82, 180.

⁹⁰Ghana Farmer, Vol. VI, No. 2, p. 481.

⁹¹Data from the Ghana Planning Commission.

⁹²E.N. Afful, "Production Cost for Maize--Assesewa Case Study." Ghanaian Bulletin of Agri. Econ., Vol. II, No. 1, March 1962, pp.200ff.

£ 2 per acre.⁹³ Labor costs (including hired labor, which constitutes about 40 percent of the total labor costs per acre) totalled about two-thirds of total production costs. There appear to be some economies of scale. Production costs on five-acre farms were lower than on smaller 1.5 acre farms; the optimum size for traditional farming appeared to be about three to four acres. The largest single cash expenditure was for clearing land, done mainly by hired labor -- about 135 manhours or £ 3/3s/2d an acre.

In traditional markets, the maize farmer faced serious price fluctuations, rising to a pre-harvest peak of about 100s per bag and falling to a trough of 48s per bag just after the harvest.⁹⁴ The Agricultural Produce Marketing Board established a buying pool for maize which appears to have functioned sporadically throughout the latter 1950's, setting producer prices at an estimated average of the seasonal fluctuations.

Problems of storage and marketing plagued one of the early maize cooperatives established in the Trans-Volta/Togoland Region. The Abutia Maize Producers Cooperative Society there failed miserably in 1954-55 due to lack of storage facilities and "disloyalty" of those members who sold above fixed prices to local traders. Cooperative organizers expressed hopes that a small type of silo newly developed by the Agricultural Department would help overcome the storage problem in the future.⁹⁵

By 1960, three maize cooperatives were reported in operation in Ashanti with two more preparing for registration. A maize cooperative in Sunyani, Brong-Ahafo, reported to include three and a half square miles, acquired the new type of grain

⁹³ ibid.

⁹⁴ ibid. and Afful, "Seasonal Variation in Maize Price in Ghana," Ghanaian Bulletin of Agricultural Economics, Vol. II, No. 2, June 1962.

⁹⁵ Report of the Registrar of Co-operative Societies, 1954-55, p. 4. Problems of storage have been held to be a major problem in the commercialization of maize crops. The Seven Year Plan held that 20-30 percent loss of domestic food crops is experienced under conditions of local storage techniques. The World Bank Mission claimed that studies show losses of about 15 percent in local storage and that these losses can be reduced by utilization of small silos. However, data from a similar climatic zone in Nigeria show storage losses at farm to actually be only one to five percent. (Data from the Ghana Planning Commission; cf. Miracle, op. cit., pp. 243, 280.)

silo perfected by the Agricultural Department, as well as the driers and shellers required for "optimum operation."⁹⁶ These were supplied by the Ghana Cooperative Marketing Association for £ 2,600 to be repaid in instalments over a period of five years. During the shortage of maize in Northern Ghana in 1959, the Sunyani cooperative members sold directly to dealers outside the cooperative marketing machinery on the rising market, leaving their society with little to pay even its overhead expenses. The 1959 Cooperative Annual Report comments: "It is now an established fact that where cocoa, the king crop, is the main occupation, cooperative activity in other crops shows up poorly in comparison."⁹⁷ The following year, however, the same society encountered serious problems with marketing through traditional dealers. Three hundred and seventy-five long tons of maize delivered by the members were held in stock "...on account of a misunderstanding between the societies and an intending purchaser whose confident assurances to the societies were evidently calculated to drag the transactions up to a time when the market price would be more favorable to him. This has been a bitter but instructive lesson for them."⁹⁸

In 1958, the Agricultural Development Corporation (ADC) attempted to establish a producers cooperative of 50 farmers in Tsito, each family farming ten acres in an area of 500 acres of land. The ADC provided the capital of £ 17,619 and acted as the managing agent in control of financing the farming program and the marketing; ultimately it planned to turn the whole project over to the farmers. Each ten acre family area was to be divided into four two-and-a-half acre plots, one plot for a family food crop, two plots for cash crops, and one plot for green manure and livestock. By 1960, 60 acres were actually under cultivation. The first crop of maize, yams, and vegetables brought £ 376 which paid the first year's installment for machinery and equipment supplies by the ADC and reimbursed advances for the members' wages. This cooperative was one of those incorporated into the UGFCC.⁹⁹

⁹⁶Agble, op. cit.

⁹⁷Report of the Registrar of Co-operative Societies, 1959, p. 13.

⁹⁸Report of the Registrar of Co-operative Societies, 1960, p. 14.

⁹⁹A.K. Montumi, "Development of Estate Agriculture in Ghana," unpublished thesis in partial fulfillment of requirements for Diploma in Tropical Agriculture at Kwame Nkrumah University of Science and Technology, Kumasi, November 1961; Report of the Registrar of Co-operative Societies, 1960.

In the mid 1950's, some women farmers of the Fra-Fra tribe in the north were organized into a cooperative. They were to grow dry-season tomatoes in areas irrigated by small dams built by the Department of Agriculture. Until 1960, they sold their produce in the local market of Bolgatanga, but "the buyers always...fix the prices to thier own advantage, thus making large amounts of profits at the sweat of the producers, but such a situation does not tend to give any incentive to the gardeners to enable them to carry on the gardening heart-satisfyingly."¹⁰⁰ The cooperative lacked capital, and it was considered "uneconomic to install expensive equipment for a purely seasonal crop of no great value and with no assurance of obtaining supplies in sufficient quantity."¹⁰¹ In 1960, the Agricultural Economics Division of the Ministry of Agriculture established a marketing center at the Zuagungu Agricultural Station and brought in the produce from the farmers in Department trucks free of charge, but made no advance payments to the farmers due to lack of funds. The next year, the local Fra-Fra Council granted a loan to permit advance cash payments, and the Department transported the tomatoes to Kumasi. Here again they encountered difficulties:

The very middlewomen, the only major buyers of local fresh tomatoes, whom the plan aimed at ousting to give the producers a chance of yielding high turnover, were on the market, well mobilized to get rid of any interested buyer who would offer any prices higher than ¹⁰² at which they had collectively offered to buy.

The Economics Division therefore bought directly from the gardeners and sold to the middlewomen at reasonably higher prices and distributed the profits proportionally to the gardeners. As a result, by 1962 the number of producers increased from 200 in seven villages to 400 in 18 villages producing 45 long tons of tomatoes valued at £ 1,692, including a profit of £ 374.¹⁰³

¹⁰⁰L.A. Asare, "Dry Season Tomato Production and Marketing, Fra-Fra District," Ghana Farmer, Vol. 11, No. 2, pp. 66-68.

¹⁰¹Report of the Registrar of Co-operative Societies, 1955-56, pp. 5-6.

¹⁰²Asare, op. cit., p. 68.

¹⁰³ibid.

Thrift societies appeared to be popular in the Northern and Upper Regions. Their savings, however, averaged only 2s per month per member. One, a two-year old society composed of Fra-Fra settlers in Damongo, purchased a corn mill for the community and charged members a small fee to provide capital replacements and running expenses. Six others were registered to become marketing cooperatives with a view to saving for the future since Cooperative Bank advances were unavailable for means of transport.¹⁰⁴

According to Sheila Gorst, thrift and credit societies have frequently failed in Ghana. The major reasons cited are the following:

Firstly, members try initially to save at too high a rate in relation to their salary; then, when enthusiasm wanes and financial difficulties appear--often due to family obligations--savings become irksome and contributions cease. Secondly, if the salary-earner moves there may be no society to which his membership and savings can be transferred. Finally, there is insufficient accounting knowledge.¹⁰⁵

THE UGFCC TAKES OVER

Late in 1959, the UGFCC petitioned for the withdrawal of non-farmer, non-cooperative buying agents from the purchase of export crops. The CMB carried out a study of alleged buying agent malpractices which included: doubtful weighing of cocoa, exorbitant interest rates on advances, and the requirement that cocoa which was not properly dried and fermented be delivered to speed up debt repayment. The Ministry of Trade and Industry at first rejected the plea of the UGFCC to replace the buying agents,¹⁰⁶ but two years later the UGFCC did become the sole buying agent, replacing not only the private buying agents, but also absorbing the Cooperative Marketing Association.

¹⁰⁴ Report of the Registrar of Co-operative Societies, 1960, p. 7.

¹⁰⁵ Gorst, op. cit., p. 118.

¹⁰⁶ Cocoa Marketing Board News, No. 11, July 1959.

NEW APEX ORGANIZATION--THE NCC

In 1960, Kojo Botsio,¹⁰⁷ the minister responsible for cooperatives, outlined government proposals for uniting the cooperatives into "one supreme organization, and on strictly democratic terms." In the ensuing sharp debate, the Cooperative Alliance rejected the proposal. The Alliance itself was then superceded and declared redundant; the government did not give it the £ 4,500 grant of the previous year, but granted instead £ 10,000 to a newly formed apex organization, the National Cooperative Council, which took over the Alliance's assets.¹⁰⁸ The Department of Cooperation was dissolved and the duties of the registrar were vested in the executive secretary of the National Council. Initially the Department's officers were assigned to the Council, but they were later withdrawn, leaving them without trained personnel.¹⁰⁹ During the ensuing year's reorganization, the activities of the Council "were...limited in scope and rarely went beyond officials of the Council explaining its aims and functions to cooperators and the general public....Steps were also taken to bring all cooperatives within the orbit of the Council."¹¹⁰

The United Ghana Farmers Cooperative Council became the sole marketing agency for cocoa and other crops in 1961. It turned the premises of the old cooperative societies, as well as those of the former private buyers, into agencies for collecting cocoa through a secretary-receiver on behalf of the UGFCC. Essentially it became a highly centralized buying agency with 1,500 branches for the purchase of the produce of cocoa and non-cocoa cooperative societies. The societies' executive committees continued to exist, but their discussions were limited, and they were expected to take orders from above. The members delivered cocoa to the society's shed. The secretary-receiver conducted pre-sale inspection before weighing and paid the farmers from the money advanced by the UGFCC to the

¹⁰⁷Botsio had been instrumental in forming the Party in its early days. In 1961, however, he and several others were asked to resign from their government posts on the grounds that they had used their positions to amass large fortunes. Botsio was reinstated as Minister of Foreign Affairs along with the rest of the old guard after the attempt to assassinate Nkrumah at Kulungugu in 1962.

¹⁰⁸Report of the Registrar of Co-operative Societies, 1960; and National Investment Bank, op. cit.

¹⁰⁹National Investment Bank, op. cit., p. 10.

¹¹⁰Report of the Registrar of Co-operative Societies, 1960, p. 10.

society. An elaborate system of inspections was established by which the secretary-treasurer of the UGFCC double-checked the activities of the secretary-receiver.¹¹¹ The funds from the sale of surplus cocoa were distributed by giving a third to the society treasury, a sixth to the chief farmer (usually one of the bigger farmers in the area), a sixth to the secretary-receiver, a sixth to other committeemen, and a sixth to the reserves. The farmer-members did not receive any share.¹¹²

In June 1962, the National Cooperative Council was liquidated and a Central Cooperative Council was simultaneously established to take over its assets and liabilities. A third of the staff was dismissed. The UGFCC, which now incorporated all the agricultural cooperatives, became independent. The government withdrew the subsidy from the national council, and essentially all that remained was the independent UGFCC and a separate "industrial" cooperative.¹¹³

UGFCC payments from the Cocoa Marketing Board multiplied rapidly as the fee per ton purchased was increased and the tonnage expanded. The stated allowance for profits appears to be very high

¹¹¹In 1965, check testing at the purchasing centers, designed to clarify responsibility for deterioration and to disclose false grading and malpractices, was reported to have been abandoned. (Data from the Ghana Planning Commission.)

¹¹²National Investment Bank, op. cit., p. 8.

¹¹³ibid. The non-agricultural cooperatives are reported to have gradually disintegrated with members showing a "definite unwillingness" to pay levies because they felt the organization 1) did not meet their needs; 2) exhibited autocratic tendencies; 3) failed to adhere to cooperative principles; 4) showed unfair practices in dealing with members. (ibid., p. 21.)

especially since the producer prices had been reduced:¹¹⁴

Payments by Cocoa Marketing Board to United Ghana Farmers' Cooperative Council for Services as Buying Agent for Cocoa, 1961-1965

Season	Block Buying Allowance (L/s/d)	Agreed Profit per Long Ton (L/s/d)	Total per Long Ton (L/s/d)	Purchases (Long Tons)	Total Receipts (L)
1961-2	3/6/3	2/4/10	10/11/1	409,411	4,320,992
1962-3	10/3/11	2/4/10	12/8/9	421,736	5,245,340
1963-4	11/11/0	2/13/10	14/4/10	435,126	6,196,191
1964-5	11/11/0	2/13/10	14/4/10	568,176	8,091,773

The UGFCC also took charge of much of the extension work. Both the Extension Department and the Economics Division of the Agricultural Ministry were dissolved along with the Cooperative Alliance, and the extension personnel were turned over to the UGFCC and the state farms. It was argued that the extension workers "lived in an ivory tower" at the experiment stations and "lorded it over the farmers" without helping them devise methods applicable to their situation. Too much time was allegedly spent in research and surveys and not enough on actually producing food.¹¹⁵ The research work of the Agricultural Ministry was absorbed into the Agricultural Research Institute of the National Academy of Science.

Outside of its primary efforts as the sole buying agent for the Cocoa Marketing Board, the UGFCC shifted the emphasis in the field of cooperatives from a few carefully nourished societies to a mass campaign to create cooperatives throughout the country. On paper, the expansion of cooperative farms was almost fantastic. By 1964, the country had 992 cooperative societies outside of cocoa marketing with an average membership of 27 members and a total

¹¹⁴Data from the Ghana Planning Commission.

¹¹⁵S. La Anyane, Interview, 26/4/66, and The Ghana Farmer, Vol. VI, No. 4, p. 137.

membership of 26,098. They had acquired 486,335 acres of land, but only 23,771 (4.9 percent) were reported to have been cleared and planted by 1964.¹¹⁶

These UGFCC cooperatives did not own their own machinery, but were served by service stations. Approximately 15,700 acres were reported to have been cleared, 9,500 acres prepared for sowing, and 3,800 acres sown or planted by mechanical means by 1964. Much of the produce from the cooperatives was sold locally. A third of the cooperatives sold their produce wholesale, one third retailed it, and one third did not report any marketing activity.

Members of the cooperatives contributed to the cooperatives in other ways besides their labor on the farms. Some 10,494 people were reported to have contributed funds, 1,350 contributed land, 31 contributed livestock, and 123 contributed farm implements.¹¹⁷

The farmers' demand for credit was met in the 1960's primarily by private money lenders and to a limited degree by the UGFCC and the Rural Credit Department of the Ghana Commercial Bank. An Agricultural Credit and Co-operative Bank was established only in 1965. The bank's authorized share capital was £ 15 million. The government held 51 percent of the issued capital. The bank's Board of Directors included representatives of the three commercial banks (one state-owned, the other two, British), the National Investment Bank, the Bank of Ghana, the Ministries of Finance, Agriculture, and Cooperatives (established in 1965), and the UGFCC. The bank was authorized to accept deposits and open branch offices, but initially it worked through field offices of the three commercial banks. It took over the assets of the Rural Credits Department of the Bank of Ghana and issued £ 500,000 of shares in favor of the Bank of Ghana to finance its transactions. A ten-year moratorium was put on outstanding farm debts held by money lenders and secured by real estate. Within the first few weeks after the bank was established, applications

¹¹⁶ See Appendix tables.

¹¹⁷ Ghana Ministry of Agriculture, Division of Economics and Statistics, "Statistics of Large-Scale, Specialized, Institutional and Co-operative Farming, 1964," Agricultural Census, Phase II, Vol. 1, p. 32ff.

for loans totalled £ 604,642. By June 1965, the Bank had approved £ 68,629 in loans including £ 61,584 to cooperatives; drawings totalled £ 49,470, all but £ 1,594 for loans of six to seven years with interest rates of six to eight percent.¹¹⁸

EVALUATION OF COOPERATIVES IN GHANA

Prior to 1961, the cooperative movement was confined primarily to marketing of cocoa. Outside of cocoa marketing, cooperatives were for the most part marketing societies for other export crops and some relatively small projects for production and sale of rice, maize, peanuts, and tomatoes. These small advances could hardly have been said to have revolutionized agricultural productivity or even to have greatly facilitated the marketings of small-scale non-cocoa farmers.

After 1961, with the installation of the UGFCC as sole buying agent for the Cocoa Marketing Board, the government emphasis on cooperatives was dramatically intensified, at least on paper, with the creation of almost 1,000 non-cocoa producer societies. A careful analysis of this post-1961 development may shed some light on the controversy as to whether cooperatives are likely to increase the marketings of small-scale African farmers or facilitate rapid increases in productivity.

Evaluation of the post-1961 agricultural cooperatives organized by the UGFCC in Ghana might best be divided into two parts: the cocoa buying cooperatives and those outside of cocoa.

COCOA MARKETING

The heart of the UGFCC was, like that of its predecessors, in the cocoa purchasing business. The UGFCC did not, however, seek to alter the fundamental system of producing cocoa that had been established at the turn of the century. The large increase in cocoa output from 1955 to 1965 was carried on under the old share-cropping-hired labor system which left half the income in the

¹¹⁸Data from the Ghana Planning Commission.

hands of a fourth of the farmers.¹¹⁹ In fact, reportedly successful efforts to organize the abusa, or sharecroppers, and hired farmers for better incomes and conditions, were abandoned in 1961. It was argued that the cocoa farmers (landlords) constituted the backbone of the Ghanaian economy and to put pressure on them might hinder the expanded cocoa production necessary to increase the earnings of foreign exchange required to carry on the development program.¹²⁰

Nor did the establishment of the UGFCC as the sole buyer of cocoa significantly affect the production techniques used in the cocoa belt.¹²¹ The farmers still planted their cocoa trees extensively, relying on cheap labor rather than known improved techniques for increasing productivity.¹²² As a result, cocoa plantings spread throughout most of the remaining available forest land; some experts have argued that this avenue of expanded output leads to mining of the soil and holds potentially serious dangers for Ghana's main export crop as well as its entire agricultural program.¹²³ The UGFCC did little to encourage farmers to utilize more modern methods to increase output per acre.

¹¹⁹ Ghana, Office of the Government Statistician, Statistical and Economic Papers, No. 7, Survey of Cocoa Producing Families in Ashanti, 1956-57 (Accra: 1960), p. 17.

¹²⁰ Balogun, Executive Secretary, Ghana Trade Union Congress, in talk to A. Seidman's graduate seminar at the Institute of African Studies, University of Ghana, 1965. Relations between the sharecroppers and hired laborers and the farmers were reported to have become so bitter as producer prices fell and payments were held up that in one instance the sharecroppers are reported to have burned a farmer to death (Cocoa Commission, op. cit.).

¹²¹ W. Birmingham, et al., op. cit., pp. 240ff, 385ff.

¹²² However, failure to increase productivity may not reflect negatively on African farmers. Small-scale farming is complex in tropical Africa and new methods which appear desirable often are not economic when account is taken of the conditions of African rural economies. Data from the Nigerian and Ivory Coast portions of the West African cocoa belt suggest that labor-intensive methods of cocoa production are not economic. (See John C. de Wilde, et al., Experiences with Agricultural Development in Tropical Africa (Baltimore, 1967).

¹²³ W. Birmingham, et al., op. cit., pp. 385-390.

As the world cocoa price fell, the government eliminated subsidies to the farmers for spraying to eliminate capsids and for cutting out trees affected by swollen shoot disease, so that the farmers neglected even these programs which had up to then been very successful.¹²⁴

In the area of marketing cocoa actually harvested, however, the UGFCC had some success. It moved the crops to the ports efficiently. Its inspection service, initially assisted by Cadbury personnel, succeeded in improving the quality of cocoa; although it has been held that the 98 percent claim of the UGFCC officials was exaggerated, at least 90 percent of the cocoa was grade one.¹²⁵ The foreign buyers were satisfied with the performance.¹²⁶

Despite the UGFCC success in the actual marketing of cocoa, the farmers apparently became increasingly restive under its administration of marketing. Farmers' attitudes were aggravated by the fact that the falling world cocoa price led the Cocoa Marketing Board to cut the producer price from 50 to 40 shillings a head load,¹²⁷ which, together with rising consumer goods prices, reduced producers' real income to about 70 percent of the former record low level of the Great Depression.¹²⁸ But there is also accumulating evidence to suggest that many UGFCC secretary-receivers utilized their positions to enrich themselves at the expense of the farmers. The local committees appointed by the UGFCC frequently comprised the more well-to-do farmers and local political party functionaries. The less fortunate farmer-members were given little say in the direction of the societies and became increasingly alienated. At post-coup hearings, farmers

¹²⁴ ibid., pp. 245-248.

¹²⁵ Cocoa Commission, op. cit., 8/25/66.

¹²⁶ After the coup, the foreign firms refused return to the cocoa buying business; for them, it was at best marginal and involved considerable potential political opprobrium. (ibid., and Commission on the Marketing of West African Cocoa, Report, W. Nowell, chairman, Cmnd. 5845.)

¹²⁷ The CMB maintained a higher producer price from 1961 to 1965 only by paying out of its reserves a total of some 35 million pounds.

¹²⁸ Data from the Ghana Planning Commission.

complained that the UGFCC rates of interest on loans rose as high as 20 percent per year (1s per £1 for three months). Corruption was alleged to be widespread. Farmers stated that secretary-receivers would take a handful of cocoa from the top of each bag to collect in their own store. Scales were reportedly moved into dark corners so that farmers could not check the weights. Sometimes, whole bags of cocoa would be declared subgrade and simply confiscated; the farmers would receive nothing for it. De Graft-Johnson, Chairman of these hearings, and a longtime supporter of cooperatives in Ghana, reported that the farmers had become so alienated by the UGFCC that they preferred a return to foreign buyers rather than establishment of new cooperatives.¹²⁹

NON-COCOA COOPERATIVES

The UGFCC was, perhaps not surprisingly, less successful in its efforts to establish cooperatives outside of cocoa marketing. Although the number of cooperatives reportedly organized multiplied enormously rapidly, their actual production was low. Careful scrutiny of the statistics suggests that summary data failed to expose the true picture. On the average, each producer cooperative cultivated only 23.9 acres. Every member cultivated only 0.9 acres, far less than the five to six acres cultivated by individual private farmers on the national average.¹³⁰ In reality, the cooperative member apparently commonly

¹²⁹Cocoa Commission, op. cit.; S. La Anyane interview, op. cit.; Amofo interview, May 11, 1966; National Investment Bank, op. cit. After the coup, Appiah-Danquah, head of the UGFCC, admitted to owning four farms producing cocoa, maize, rubber, and palm kernels on which he employed, through his cousin, some 30 laborers. In addition, despite the fact that he earned only £ 3,500 a year in salary, he admitted he had acquired one three-story house valued at £ 15,084, three more in Accra valued at £ 29,164, another in Kumasi valued at £ 2,822. His wife, with no paid employment, admitted that she owned two more houses and two more farms with a total value of £ 30,000 for which her husband had paid. His brother, who owned a transport company and a £ 10,000 building in Accra, became the Chief Internal Auditor of the UGFCC in 1963. (Jaigge Committee Hearings reported in Ghana Daily Graphic, 11/24/66; 11/22/66; 11/26/66; 11/29/66; 11/30/66.)

¹³⁰Ferdinand Stocces, "Agricultural Production in Ghana in 1960-1965," Statistical Annex; and discussion with Department of Economics, Unpublished paper, University of Ghana, June 1965.

doubled as a private farmer growing his own crops in addition to those grown on the cooperative land. Two-thirds of the cooperatively cultivated area was planted with annual crops, mainly rice (34 percent) and maize (14 percent),¹³¹ and one third with permanent crops, mainly rubber (26 percent). These three crops together covered 74 percent of the area cultivated by the cooperatives. The cultivation of rubber, most of which was not yet bearing, was concentrated in the Western Region, making this the most important of the cooperative regions.¹³² Only a few cooperatives kept livestock. There were 130 cattle, 1,665 pigs, 6,908 poultry, and few sheep, goats, turkeys, ducks, guinea fowls, and rabbits. Little irrigation or drainage was introduced by the cooperatives. Only 28 cooperatives carried out irrigation projects, irrigating only 135 acres, mostly with hand pumps; only two acres were irrigated with mechanical pumps. Only one acre was drained.¹³³ The UGFCC remained the provider of services such as fertilizers, tractors, and seeds. Only about five percent of all farmers were actively associated with the UGFCC, however, and there were not enough inputs even for them.¹³⁴

Prior to the coup, the National Investment Bank¹³⁵ made a study of the cooperatives at the request of the government. The results of this study indicated some of the reasons why the cooperatives did not expand output more rapidly. They were not in the first place true cooperatives; there was a "practically complete absence" of standardized uniform methods of operation. Officers responsible appeared "uninformed on proper farming methods and cooperative practice." Some were simply traditional leaders, e.g., village chiefs, who assigned work in a semblance

¹³¹That cooperative production of maize on this limited scale without adequate development of marketing facilities failed to meet the needs of the population is suggested by the fact that by 1965 maize prices had doubled since the earlier study cited above (see p. 25): the range was reported as 286s per 220 lb. bag before harvest and 120-160s per bag after harvest.

¹³²Agricultural Census, Phase II, Vol. 1, p 32ff.

¹³³ibid.

¹³⁴Data from the files of the Ghana Planning Commission.

¹³⁵National Investment Bank, op. cit.

of old communal patterns. Some received useful advice and did effective work; many received no assistance and did little. It was reported that: "Failure to adopt systematic operating methods is prevalent."¹³⁶

The UGFCC was responsible for technical aid and services, but the National Investment Bank noted that "...deficiencies in this area are evident."¹³⁷

No audits were carried out in the non-coa societies until 1964, and those finally carried out indicated that a considerable number of the societies lacked efficient secretaries.¹³⁸

Inadequate training facilities were supplied for the personnel of the burgeoning cooperative movement. The Kwame Nkrumah Cooperative College was supposed to conduct courses and seminars for secretaries, but lack of staff led them to call on officers of the UGFCC and other groups. Furthermore, the National Investment Bank study observed: "Trained and experienced staff have been withdrawn from training, registration, inspection, and other activities that are believed to be essential to a permanent, high quality cooperative development."¹³⁹

The Extension Division in the Ministry of Agriculture was re-established in 1964 and began to function again in 1965. However, it had only 15 professionals (of whom only three to four were experienced since the UGFCC continued to hold onto the others) and 250 sub-professionals; in 1961, in contrast, some 49 professionals and 239 sub-professionals had been engaged in extension work.

The most significant raison d'être of the UGFCC program was its claim that it was introducing mechanized farming. It directed large sums to the acquisition of tractors and combines for

¹³⁶ Ibid., p. 14.

¹³⁷ Ibid.

¹³⁸ Ibid.

¹³⁹ Ibid., p. 15.

clearing, ploughing, and reaping. By 1964, the Council had spent about £ 2.55 million on tractors and equipment, mainly for rice and maize projects and for clearing land.¹⁴⁰

Planned Program of Acquisition of Additional Agricultural Machinery for United Ghana Farmers Cooperative Council, 1965-1968¹⁴¹

	Number of Crawler Tractors	Number of Wheeled Tractors	Number of Combine Harvesters
1965	180	999	56
1966	280	1,090	216
1967	380	1,190	366
1968	480	1,290	486

It planned to continue expansion of its purchases and initiated negotiations with two tractor manufacturers to establish tractor assembly plants in Ghana. The manufacturers were to establish and operate the plants at their own expense.

The tractor stations charged farmers clearing, stumping, and breakage charges totalling £ 15 per acre; for ploughing previously ploughed land, £ 2/10s per acre. In practice, it appeared the operating costs were several times higher. By 1964, the total declared tractor and equipment earnings were £ 197,884, about eight percent of their total reported value. Assuming this sum was actually collected, it appears rather low, particularly in view of the fairly high degree of breakage and problems of maintenance which led to rapid depreciation.

The tractor stations were mostly operated by the technical staff of the Agricultural Ministry's former cooperative personnel who had been seconded to the UGFCC. The efficiency of the stations

¹⁴⁰Data relating to the mechanization program is from the files of the Ghana Planning Commission.

¹⁴¹ibid.

appeared low due to the size of the program and speed with which it had been established, physical problems of breaking new ground, and the dispersal of projects and lack of workshops-- all of which contributed to a high level of machine breakdown which was aggravated by shortages of spare parts. According to assessments by UGFCC staff, probably only 50 percent of the tractors and equipment were useable at one time.

The UGFCC was unable to make the semi-annual repayments required by the suppliers' credit contracts under which they had purchased the machinery. The government had to assume responsibility. Losses appear to have resulted from the UGFCC's inability to collect hiring charges from the farmers at least in part due to use of the machinery for production of unprofitable crops; and the lack of an established system of contracts and fee collection. To improve the situation, the Council asked the newly formed Agricultural Credit and Cooperative Bank to guarantee repayment of the hiring charges by cooperatives and individuals. The bank refused unless there was first a reorganization of the hire-services organization.

The UGFCC mechanization program appeared to have been much over-extended. Ghana might well have used less foreign exchange in the past few years if she had imported the quantities of food-stuffs produced under the UGFCC mechanization programs rather than purchase the farm machinery, fuels, spare parts, and lubricants employed in producing them.

The UGFCC, with technical assistance from the Food and Agricultural Organization, executed a four-year program which proved that fertilizers could be highly effective in increasing productivity per acre in Ghana. The farmers appear to have known of these studies and to have been interested in using fertilizers. However, lack of foreign exchange limited imports and fertilizers were inadequately employed.¹⁴² Only 14 percent, or 3,378 acres, of the cooperative lands were fertilized with 1,644 cwt of different fertilizers such as compound fertilizer (NPK) sulphate of ammonia super phosphate, with a total value of £ 2,119. This is a fertilizer application of 0.5 cwt per acre of the treated area and of 0.07 cwt per acre of the planted area.¹⁴³

¹⁴² ibid.

¹⁴³ Agricultural Census, Phase II, Vol. I, p. 32ff.

After 1961, the agricultural research program outside of cocoa failed to expand rapidly as needed.¹⁴⁴ Large amounts of funds were spent on research by the Academy of Sciences, but their use was not adequately coordinated and directed to on-the-farm use. The Cocoa Research Institute limited its efforts primarily to cocoa. Large numbers of vacancies in professional posts (76 percent of the 220 professional posts and 61 percent of 918 sub-professional posts were vacant in 1965), suggested the need to improve incentives as well as to establish lower level education programs to produce future candidates for university level agricultural research and extension programs. It has been argued that the lack of security resulting from frequent changes and political domination of agricultural agencies aggravated the problem of personnel shortages.¹⁴⁵ The Agricultural Credit Bank, established in 1965, proposed to work primarily through cooperatives. It had not had time to become fully functioning by the time of the 1966 coup. However, unless the UGFCC had modified its attitudes and policies, there would have been a danger that credit would be used for uneconomic purposes, essentially shifting the UGFCC financial burden to the bank.

Examination of some specific cooperative projects indicate some of the problems encountered by this hastily patched together crash program of building cooperatives. The UGFCC scored initial success in stimulating expanded rubber plantings (to over 6,000 acres) by paying cooperative members a $\frac{1}{2}$ 5 per acre subsidy. This program was initiated in 1960 with U.S. AID advisors who introduced new improved seed varieties from seven newly-established nurseries. The AID plant pathologist reported:¹⁴⁶

The Western Region with its high rainfall, good deep soil and excellent transportation facilities is an exceptionally favorable one for rubber or any other tree crop....The very good growth of the rubber trees in all areas visited...demonstrates that rubber does well....Large tracts of suitable land are still available and there is a surplus of land to be had. Also a local supply of rubber seed is assured and the best high-yielding clones are on hand for budding.

¹⁴⁴Data from the Ghana Planning Commission.

¹⁴⁵Discussions with personnel from various fields of agricultural work and interview with S. La Anyane, op. cit.

¹⁴⁶National Investment Bank, Domestic Rubber Production, Report by the Development Service Institute (Accra: 1965), p. 27.

The trees they had already planted were not expected to be ready for tapping until 1966-67. The UGFCC dropped the subsidy in 1962, however, and the necessary maintenance program, as well as continued expansion, fell off.¹⁴⁷ Many of the cooperators were reported by 1964 to have left their farms to work on neighboring state rubber farms where they received regular wages.¹⁴⁸

The UGFCC sought to expand production of maize and rice at a more rapid pace by introducing mechanized farming methods for clearing, ploughing, and reaping. An interesting example is a fairly typical communal cooperative unit of ten acres of maize and five acres of peanuts with 25 members in Ashanti. The UGFCC tractor hiring unit had ploughed the land. The members had planted unimproved maize and peanuts with bad spacing and maintenance and slipshod harvesting; 30 percent of the peanuts were left in the ground. The farm was allegedly below the standards of the private farms in the neighborhood.¹⁴⁹

There appears to be some evidence that cooperative units in which the farmers kept their own land, as in the case of rice in the Northern and Upper Regions, were more successful. The farmers still afforded priority cultivation to their own private farms, but the standards of the cooperative units appear to have been higher than the communally-owned units and pressure could be brought to bear on less efficient producers.¹⁵⁰ The UGFCC provided machinery to clear and plough land for upland paddy, encouraging the farmers to plant in contiguous blocks of their own plots. The farmers and their families were mainly to weed and harvest the rice. Reports suggest, however, that in many areas, these plots were sown too late and weed control was inadequate. The price of domestically produced rice at the farm gate was reported to be £ 67.1 per long ton--"much higher" than the cost of milled rice at Tema, the main port.¹⁵¹

The UGFCC was building 15 integrated rice mills with a capacity of 30 long tons of paddy a day in the rice growing areas by 1965, but none were in operation. A marketing officer

¹⁴⁷ ibid., p. 4.

¹⁴⁸ ibid., p. 8.

¹⁴⁹ Data from the Ghana Planning Commission.

¹⁵⁰ ibid.

¹⁵¹ ibid.

working with each mill was to supply seed and fertilizer and maintain an equipment pool for the farmers, who could obtain these supplies for credit and pay off the debt by delivery of paddy to the mill at a fixed price of £ 3 per 180 lbs.¹⁵² This appeared to be substantially below the price currently being obtained in the area. Whether the UGFCC, together with the mill operators providing services and the mills to assure a steady market, would have been able to stimulate production sufficiently to achieve this goal, one cannot say.

Other problems were encountered in the agricultural aspects of the Volta resettlement program which was to be built around cooperatives. The situation at one farm, Nkwakubew,¹⁵³ indicates some of these. The cooperative included about 3,000 farmers resettled due to Volta Lake flooding; only a small fraction of the 80,000 persons moved for the project. Dozens of new tractors stood idle next to one empty storage and grain mill. The woodland had not been cleared, because it required heavier equipment. Arguments over land tenure with local chiefs had not been settled. The poultry side of the project, based on imported one-day old chicks housed in raised chicken runs (built of imported cement), had ground to a halt because foreign exchange restrictions had ended the import both of chicks and their feed (the latter had to be imported until the farm could produce enough for its needs). (Incidentally, the marketing of the chicks, until this impasse, appears to have been primarily through a United African Company affiliate, and the price received by the government-subsidized producers appears to have been about half that paid by consumers in Accra.) It may be added that the farmers, quite discouraged by the whole affair, and seriously in need of income, then sought to catch fish, for which there was a ready and lucrative market, in the nearby Volta Lake. This the authorities are alleged to have opposed; it did not fit into the blueprints drawn up in Accra--blueprints which apparently failed to consider adequately either the fisherman-farmer's particular skills or the potential of the local resources.¹⁵⁴

¹⁵²ibid.

¹⁵³visited by A. Seidman, February 1965 and March 1966.

¹⁵⁴Interview with Assistant Officer in charge of Nkwakubew Cooperative Farm, March 12, 1966.

Social welfare workers reported, however, that some of the other Volta resettlement projects where they had worked were planned and executed more successfully and with greater consideration for local skills and resources.¹⁵⁵

The dry season tomato cooperatives in the north, conceived as part of an overall land planning scheme, failed to expand apparently because the marketing program initiated by the Agricultural Department was dropped. A few attempts were made to fly tomatoes south, but they were sold through the existing market organizations, and by 1965, prices were as high as one shilling a tomato in Accra. The land planning program, of which the tomato project was only a small feature, was abandoned altogether.

Other factors which cannot be verified from the literature may also be of major importance. Talks with 37 farmers, cooperative officers, and government officials in all major regions of Ghana¹⁵⁶ indicate that the principal reasons for the poor record of cooperatives in Ghana are the following:

1. Cooperatives were often forced on farmers by the government in communities where there was no felt need for them.
2. Cooperative managers were often foreign to the community in which they worked and members of cooperatives distrusted them.
3. Cooperatives were not infrequently organized mainly to extend political control, which was resented by cooperative members.
4. Cooperative members often did not trust each other when funds were involved and apparently for good reason--embezzlement of cooperative treasuries was common.
5. Many Ghanaian farmers are highly individualistic and traditionally did not work together.

¹⁵⁵Students of A. Seidman, University of Ghana, 1965-66.

¹⁵⁶Interviews made by M. Miracle, October, 1967.

CONCLUSION

The evidence here presented is not complete, but it does suggest several tentative conclusions:

1. Until the United Ghana Farmers Cooperative Council became their primary agent, the efforts of agricultural cooperatives were limited essentially to marketing cocoa and other export crops and a few projects to augment foodstuff and export crop production and sale.
2. The UGFCC continued in this tradition, devoting its primary efforts to the successful --and increasingly lucrative-- business of purchasing cocoa for the Cocoa Marketing Board. The cocoa marketing organization, which incorporated those of the former private buying agents as well as the former cooperatives, was essentially a business organization, not a cooperative in any true sense, and appears to have been dominated by farmers and agents who had been, or became, well-to-do. It never attempted to include abusa or hired laborers, and large numbers of farmers became increasingly alienated from it.
3. In the area of non-cocoa cooperatives, the millions of pounds spent to import agricultural machinery apparently failed to contribute significantly to increased cooperative production because: (a) trained personnel were unavailable to ensure its proper utilization; (b) it was inadequately supplemented by other necessary inputs such as fertilizers, seeds, and research; (c) 'cooperative' members were not encouraged to feel that they were involved in critical decisions or responsible for their results; and the leadership involved appeared incapable for the most part of winning their real cooperation.
4. Problems of marketing which plagued early non-cocoa cooperatives appeared to remain unsolved by the UGFCC.
5. Corruption in the UGFCC appears to have contributed to the distortion of its program. The 'big money' lay in cocoa marketing, which was successfully carried out, at least from the point of view of getting cocoa in multiplying quantities from the bush to the ports, but extensive evidence suggests that corruption in cocoa marketing was widespread. Furthermore, post-coup hearings have exposed the fact that acceptance of ten percent commissions from private foreign companies supplying capital equipment and machinery was common in all aspects of Ghana's development program. The commissions may have been a contributing factor leading to over-expansion in purchase of agricultural machinery and equipment.

The evidence suggests that mass cooperative organization cannot be readily built on existing communal or tribal organizations. Rather, cooperative organization appears to require large numbers of highly trained, dedicated cadres who can work closely with the farmers in translating tested innovations into practice. The farmers themselves must be educated in the methods and techniques of cooperatives and encouraged to participate in critical decisions in light of their own ability, the available resources, and national goals.

Ghana's experience underscores the fact that vigilance is required to prevent those who might benefit in terms either of status or cash returns from thwarting healthy cooperative development. Adequate amounts of essential inputs such as fertilizers and improved seed varieties must be provided. Sufficient storage, processing, and transport facilities must be made available to ensure that farmers can sell all of their increased produce at reasonable prices. Adequate research is essential. The economic potential of given projects, in terms of both long and short range returns to the farmers and the nation, must be carefully scrutinized. Ghana's 1951-1965 experience suggests that, unless these conditions are met, mass cooperative organization is likely to fail to lead to expanded production and marketing.

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*Tables II-XVIII are from the Ministry of Agriculture, Division of Economics and Statistics, Statistics of Large Scale, Specialized and Institutional Farming, Vol. II, 1964.

APPENDIX TABLE I

Cocoa Exports*

Year	Cocoa Exports (thousand metric tons)	Value of Cocoa Exports (thousand U.S. dollars)
1948-52	241.2
1953	214.1
1954	223.7
1955	209.2
1956	238.2
1957	264.4
1958	200.5
1959	254.2	192,581
1960	307.6	186,014
1961	411.9	193,967
1962	427.8	187,664
1963	411.1	190,672
1964	387.6	190,727

*FAO, Production Yearbook and Trade Yearbook, various issues.

APPENDIX TABLE II: Ghana: Number
of Cooperative Societies
1964

REGIONS	DISTRICTS	NUMBER OF COOPS	REGIONS	DISTRICTS	NUMBER OF COOPS	
WESTERN	1 WIAWSO	33	ASHANTI	1 OFFINSO	18	
	2 TARKWA	39		2 AGOGO	34	
	3 AXIM	75		3 EJURA	25	
	4 ASANKRAGWA	32		4 BEKWA I	31	
	5 SEKONDI	17		5 OBUASI	29	
	TOTAL	196		6 MAMPONG	53	
			TOTAL	190		
CENTRAL	1 CAPE COAST	19	BRONG-AHAFO	1 ATEBUBU	14	
	2 FOSO	15		2 NKROANZA	21	
	3 SWEDRU	17		3 WENCHI	22	
	4 DUNKWA	25		4 GOASO	7	
	5 ADJUMAKO	18		5 SUNYANI	22	
	TOTAL	94		TOTAL	86	
EASTERN	1 GA-RURAL	18	NORTHERN	1 TAMALE	22	
	2 ADANGBE-SHAI	22		2 SALAGA	8	
	3 MPRAESO	12		3 YENDI	16	
	4 AKIM ODA	18		4 DAMANGO	15	
	5 K' DUA/SOMANYA	16		5 BOLE/WALEWALE	39	
	6 NEW TAFO	13		TOTAL	100	
	7 ODUMASI KROBO	9	UPPER	1 WA	28	
	8 ADA	9		2 TUMU	7	
	9 SUHUM	10		3 BOLGATANGA	18	
	TOTAL	127		4 LAWRA	27	
VOLTA	1 SOGAKOPE	14	5 NAVORONGO	36		
	2 BENU	10	6 BAWKU	19		
	3 JASIKAN	24	TOTAL	135		
	4 KETE-KRACHI	8				
	5 HO	8				
	TOTAL	64				
			GHANA	46	GRAND TOTAL	992

**APPENDIX TABLE III:
Ghana: Cooperative Farms--
State of Establishment**

REGIONS	No. of Cooperative Societies	Member- ship	Acreage Acquired	Acreage Cleared	Acreage Prepared for Planting	Acreage Planted	Acreage Planted per Coop	Acreage Planted per Member
	1	2	3	4	5	6	7	8
WESTERN	196	4,047	168,953	7,890	7,398	7,304	38.2	1.8
CENTRAL	94	2,573	11,128	1,259	1,075	853	9.7	0.3
EASTERN	127	3,223	83,324	4,291	4,126	3,609	28.1	1.1
VOLTA	64	2,998	40,302	3,212	3,085	1,735	27.1	0.6
ASHANTI	190	2,926	78,009	4,212	2,968	2,513	13.2	0.9
BRONG-AHAFO	86	2,733	51,252	2,166	2,018	1,801	20.9	0.7
NORTHERN	100	2,539	38,679	10,427	8,302	3,710	37.1	1.5
UPPER	135	5,059	14,688	11,952	11,562	2,246	16.6	0.4
TOTAL/AVERAGE	992	26,098	486,335	45,409	40,534	23,771	23.9	0.9

APPENDIX TABLE IV: Ghana: Cooperative Farms Management 1964

REGIONS	NUMBER OF MEMBERS			CONTRIBUTION					KIND OF OPERATION								
	Total (1)	Full Time (2)	Part Time (3)	Money (4)	Land (2)	Livestock (3)	Implements (Inc. hoe & cutlass) (4)	Others (5)	Clearing (1)	Seed bed Preparation (2)	Sowing/Planting (3)	Weeding (4)	Spraying (5)	Harvesting (6)	Transportation (7)	Processing (8)	Storage (9)
	Number								Cases								
Western	4,047	3,017	1,030	1,149	139	16	3	1	165	97	165	165					
Central	2,573	2,361	212	1,717	60				2*	94	74	1	1	24	20	4	2*
Eastern	3,223	385	2,838	855	266	3	21	9	80	31	87	91	1	64	50	8	42
Volta	2,998	2,256	742	1,132	204		31		13*	16	3			2			*
Ashanti	2,926	1,688	1,238	1,977	132	12			92	78	106	107	12	79	75	16	70
B/Ahafo	2,733	2,142	591	1,659	24		8	59	24*	10	19	4	2	6	6		2*
Northern	2,539	1,113	1,426	372	27		48		42	48	54	55	9	37	37	27	32
Upper	5,059	3,308	1,751	1,633	498		12	263	34*	29	11	1	1	2	1	2	2*
Ghana	26,098	16,270	9,828	10,494	1,350	31	123	332	165	54	166	165	24	155	150	70	112
									*								*
									68	28	76	76	9	70	64	29	63
									28*	28	15	10	5	15	14	1	11*
									70	41	84	89	1	87	56	43	77
									71*	79	44	15	12	31	63	24	41*
									59	13	106	107	3	110	79	101	99
									76*	64	52	33	3	26	36	27	32*
									741	390	844	855	59	602	511	294	495
									248*	320	218	64	24	104	142	58	90

Note: *provided by extension service

APPENDIX TABLE V: Ghana:
Cooperative Farms--Tenure of Planted Land

Regions	No. of Soci-eties		No. of Farms		Rented In Cash		Rented in Kind		Purchased/Fr. Hold		Free Use		Acre- age Planted
	No.	acre	No.	acre	No.	acre	No.	acre	No.	acre	No.	acre	
	1	2	3	4	5	6	7	8	9	10	11		
Western	196	284	12	284	12	213	10	170	162	6,637	7,304		
Central	94	154	7	151	6	20	4	15	67	667	853		
Eastern	127	343	22	581	9	60	14	288	82	2,680	3,609		
Volta	64	114	3	165	1	2			55	1,568	1,735		
Ashanti	190	339	4	197	2	17			184	2,299	2,513		
Brong Ahafo	86	132	-				2		84	1,738	1,801		
Northern	100	204	-		16	642	1	20	83	3,048	3,710		
Upper	135	162	-		1	8	26	307	108	1,931	2,246		
Total for Ghana	992	1,732	63	1,378	47	962	57	863	825	20,568	23,771		

Appendix Table VI: Ghana: Cooperative Farms, Land Utilization 1964

REGIONS	Annual	LAND UNDER CROPS			Total	Land ready for planting	Land temporarily fallow	Cultivated Pasture	Acreage cleared	Uncultivated Pasture	All other land	Acreage acquired
		Veg-etable	Perennial Bearing	Non-bearing								
	1	2	3	4	5	6	7	8	9	10	11	12
----- A c r e s -----												
Western	71	-	176	7,057	7,304	94	492	-	7,890	-	161,063	168,953
Central	678	45	44	86	853	222	184	-	1,259	3	9,866	11,128
Eastern	2,776	306	144	383	3,609	517	165	-	4,291	-	79,033	83,324
Volta	1,704	31	-	-	1,735	1,350	127	-	3,212	1,280	35,810	40,302
Ashanti	2,368	38	75	32	2,513	455	1,244	-	4,212	2	73,795	78,009
B/Ahafo	1,743	28	18	12	1,801	217	148	-	2,166	-	49,086	51,252
Northern	3,710	-	-	-	3,710	4,592	2,095	30	10,427	12	28,240	38,679
Upper	2,246	-	-	-	2,246	9,316	390	-	11,952	-	2,736	14,688
Total/ Ghana	15,296	448	457	7,570	23,771	16,763	4,845	30	45,409	1,297	439,629	486,335

APPENDIX TABLE VII: Ghana: Cooperative

REGIONS	CEREALS				LEGUMES				
	Maize	Sorghum	Millet	Rice	Pea- nuts	Cow Peas	Bamb. Beans	Soya Beans	Lima Beans
	1	2	3	4	5	6	7	8	9
	-----A C R E S -----								
Western	M	10	-	2	-	-	-	-	-
	S	144	-	-	-	-	-	-	-
Central	M	480	-	-	108	24	-	-	-
	S	-	-	-	12	14	-	-	-
Eastern	M	532	-	-	1,825	87	46	-	-
	S	7	-	-	4	-	-	-	-
Volta	M	457	-	-	922	93	5	24	-
	S	-	-	-	-	-	-	-	-
Ashanti	M	1,119	1/2	7	616	86	2	-	1
	S	61	-	-	28	48	-	36	-
B/Ahafo	M	563	10	3	576	152	1	13	-
	S	-	-	-	29	22	3	16	-
Northern	M	343	408	194	2,414	29	-	-	-
	S	-	-	-	-	-	-	-	-
Upper	M	-	106	8	1,650	342	-	-	-
	S	-	-	-	10	-	-	-	-
Ghana	M	3,504	524	212	8,113	823	54	13	24
	S	212	-	-	83	84	3	-	52

Farms, Annual Crops (Main and Secondary) 1964*

TUBERS			INDUSTRIAL					TOTAL	
Manioc	Taro	Water Yams	Onions	Shal- ots	Cotton	Sugar Cane	Tobac- co	Kenaf	
10	11	12	13	14	15	16	17	18	19
-----A C R E S-----									
29	1	1	-	-	-	14	15	-	71
614	50	69	-	-	-	-	-	-	877
47	9	-	-	-	-	2	8	-	678
54	14	-	-	-	-	3	-	-	97
86	10	5	1	1	-	63	120	-	2,776
124	14	15	-	1	-	-	10	-	175
74	-	-	1	-	-	-	128	-	1,704
7	-	-	-	-	-	-	-	-	7
29	13	61	1	6	-	12	415	-	2,368
46	17	24	-	-	-	-	-	-	260
89	16	1	2	-	-	-	279	28	1,743
16	51	-	2	-	-	-	-	-	139
-	-	-	-	-	-	-	-	322	3,710
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	3	-	-	137	2,246
-	-	-	-	-	-	-	-	-	10
354	49	67	5	7	3	91	965	487	5,296
861	146	108	2	1	-	3	10	-	1,565

* M = Main Crops, S = Secondary Crops

APPENDIX TABLE VIII: Ghana: Cooperative Farms,
Vegetables (Main and Secondary) 1964*

Region		Okra	Tomatoes	Pepper	Garden Eggs	Beans (Green)	Cabbage	Melon	TOTAL
		1	2	3	4	5	6	7	8
WESTERN	M				--				
	S								
CENTRAL	M	24	10	3	7		1		45
	S	1	1	1	1				4
EASTERN	M	136	131	36	1		1	1	306
	S	1	28	40	31				100
VOLTA	M	4	10	13			4		31
	S								
ASHANTI	M	5	17	14	2				38
	S	4	17	11	11				43
B/AHAFO	M	1	17	8		2			28
	S								
NORTHERN	M								
	S		12	6					18
UPPER	M								
	S								
GHANA	M	170	185	74	10	2	6	1	448
	S	6	58	58	43				165

* Main Crops on the first line; secondary crops on the second line.

APPENDIX TABLE IX: Ghana: Cooperative Farms, Permanent Crops
(Main and Secondary), 1964*

REGIONS	FRUIT PLANTS				CITRUS						OTHER FRUITS		TOTAL		GRAND TOTAL
	PLANTAIN		BANANA		SWEET ORANGES		TANGERINE		MANGO		Bear- ing	Non- Bear- ing	Bear- ing	Non- Bear- ing	
	Bear- ing	Non- Bear- ing	Bear- ing	Non- Bear- ing	Bear- ing	Non- Bear- ing	Bear- ing	Non- Bear- ing	Bear- ing	Non- Bear- ing					
-----A C R E S-----															
Western	M	1	27			4	12			2					
	S	455	319										7	39	46
Central	M	9	19	1		7	3						455	319	774
	S	7	24				1	3				16	17	38	55
Eastern	M	32	40	30	30	2	24		2			3	10	28	38
	S	3	13				5					101	64	197	261
Volta	M												3	18	21
	S														
Ashanti	M	23	20	21		4									
	S	3	8			5				5			48	20	68
B/Ahafo	M	17											13	8	21
	S												17		17
Northern	M														
	S														
Upper	M														
	S														
Ghana	M	82	106	52	30	17	39		2	2					
	S	468	364			5	6	3		5	3		153	294	447
													481	373	854

* (M = Main Crops, S = Secondary Crops)

APPENDIX TABLE X: Ghana: Cooperative Farms

		PINEAPPLE		COCOA		COFFEE		COCONUT		OIL PALM	
		Bear- Ing	Non- Bear- Ing								
		1	2	3	4	5	6	7	8	9	10
-----A C R E S-----											
Western	M				28		7	81	136	60	540
	S	24	7								2
Central	M	24	8		2				8	3	27
	S		4						54	20	81
Eastern	M	20	10							40	156
	S										22
Volta	M										
	S										
Ashanti	M	19	2			1				7	10
	S	5									2
B/Ahafo	M									1	12
	S										
Northern	M										
	S										
Upper	M										
	S										
Ghana	M	63	20		30	1	7	81	144	111	745
	S	29	11		-	-	-	-	54	20	107

Permanent Crops II (Main & Secondary) 1964 *

KOLA		RUBBER		CASHEW		GRAPE		OTHERS		TOTAL		GRAND TOTAL
Bear- ing	Non- Bear- ing	Bear- ing	Non- Bear- ing	Bear- ing	Non- Bear- ing	Bear- ing	Non- Bear- ing	Bear- ing	Non- Bear- ing	Bear- ing	Non- Bear- ing	
11	12	13	14	15	16	17	18	19	20	21	22	23
-----A C R E S-----												
		26	6,307					2		169	7,018	7,187
										24	9	33
					2				1	27	48	75
						3		4		27	139	166
20	5				15					50	186	266
										-	22	22
										27	12	39
								5		10	2	12
										1	12	13
20	5	26	6,307		17	-		2	1	304	7,276	7,580
-	-	-	-			3		9	-	61	172	233

* M = Main Crops, S = Secondary Crops

APPENDIX TABLE XI : Ghana, Cooperative Farms

REGIONS	ANNUAL CROPS							PERMANENT CROPS			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	Total (8)	Vege- tables (9)	Coconut	
										Bear- ing (10)	Non- Bear- ing (11)
%-----			%-----				%-----				
Western	0	0	-	-	0.1	0.1	0.1	0.3	-	0.3	0.6
Central	2.0	0.5	-	0.1	0.2	0	0	2.8	0.2	-	0.1
Eastern	2.2	7.7	-	0.6	0.4	0.5	0.3	11.7	1.3	-	-
Volta	1.9	3.9	-	0.5	0.3	0.6	-	7.2	0.1	-	-
Ashanti	4.7	2.6	0	0.4	0.5	1.7	0.1	10.0	0.2	-	-
B/Ahafo	2.4	2.4	0.1	0.7	0.4	1.2	0.1	7.3	0.1	-	-
Northern	1.5	10.2	2.5	0.1	-	-	1.3	15.6	-	-	-
Upper	-	6.9	0.5	1.4	-	-	0.6	9.4	-	-	-
GHANA	14.7	34.2	3.1	3.8	1.9	4.1	2.5	64.3	1.9	0.3	0.7

Crop Areas in Percentage of Total Planted Area, 1964

PERMANENT CROPS								
Oil Palm		Rubber		Other		Total		GRAND TOTAL
Bear- ing (12)	Non- Bear- ing (13)	Bear- ing (14)	Non- Bear- ing (15)	Bear- ing (16)	Non- Bear- ing (17)	Bear- ing (18)	Non- Bear- ing (19)	
%		%		%		%		(20)
0.3	2.3	0.1	26.5	0	0.3	0.7	29.7	30.7
0	0.1	-	-	0.2	0.2	0.2	0.4	3.6
0.2	0.6	-	-	0.4	1.0	0.6	1.6	15.2
-	-	-	-	-	-	-	-	7.3
0	0	-	-	0.3	0.1	0.3	0.1	10.6
-	0.1	-	-	0.1	-	0.1	0.1	7.6
-	-	-	-	-	-	-	-	15.6
-	-	-	-	-	-	-	-	9.4
0.5	3.1	0.1	26.5	1.0	1.6	1.9	31.9	100.0

APPENDIX TABLE XII: Ghana: Cooperative

REGIONS	CROP	APPROXIMATE DATE OF SOWING, PLANTING	ACREAGE
	(1)	(2)	(3)
Western	Rubber, Citrus, Manioc	May-July	2,495
Central	Rice, Maize, Manioc	Sept.-Oct.	372
Eastern	Maize, Yam, Manioc, Plantain	Sept.-Nov.	1,053
Volta	Maize, Rice, Tobacco	Aug.-Sept.	2,543
Ashanti	Rice, Maize, Plantain, Yam	Aug.-Oct.	1,770
B/Ahafo	Maize, Rice, Peanuts	Sept.-Oct.	526
Northern	Sorghum, Millet, Rice, Maize	Nov.-Jan.	4
Upper	Rice, Millet, Maize, Sorghum	Nov.-Jan.	21
TOTAL/GHANA			8,784

Farms Second or Dry Season Cropping, 1964

PREVIOUS CROPS NAME (4)	REMARKS (5)
Rubber, Oil Palm, Coconut, Tobacco, Citrus, Vegetables, Plantain	Interest in Industrial crops.
Rice, Maize, Coconut, Manioc, Vegetables	Preparation for second season planting is encouraged.
Maize, Manioc, Rice, Taro, Plantain, Vegetables	Greater effort for foodstuff.
Maize, Rice, Tobacco, Peanuts, Vegetables	Greater effort for dry season planting.
Rice, Maize, Peanuts, Yams, Tobacco, Plantain, Vegetables, Manioc	Greater effort for dry season planting.
Peanuts, Maize, Tobacco, Vegetables	Greater effort for dry season planting.
Sorghum, Millet, Rice, Kenaf, Maize	Less effort made for second season crops.
Rice, Sorghum, Millet, Kenaf, Cotton, Maize	Less effort made for dry season crops.

APPENDIX TABLE XII: Ghana, Cooperative

REGIONS	Holdings with cattle (1)	CATTLE						Helpers (8)
		Calves under 1 year			Young stock 1-2 years			
		Male (2)	Female (3)	Total (4)	Male (5)	Female (6)	Total (7)	
Western								
Central								
Eastern								
Volta	1	20	15	35	6	-	6	11
Ashanti	1	5	12	17	6	5	11	8
B/Ahafo								
Northern								
Upper								
Total/Ghana	2	25	27	52	12	5	17	19

Farms, Cattle, Sheep & Goats, 1964

					SHEEP			GOATS			
Cow used for Milk (9)	Meat (10)	Bulls for Service (11)	Other cattle for Meat (12)	Draft (13)	Cattle Total (14)	Under 1 yr. (15)	Over 1 yr. (16)	Total (17)	Under 1 yr. (18)	Over 1 yr. (19)	Total (20)
						26	39	65	39	37	76
						5	15	20			
						3	3	6	2	1	3
21	14	1			88						
-	32	4			72	7	14	21			
						14	26	40			
21	46	5			160	55	97	152	41	38	79

APPENDIX TABLE XIV: Ghana, Cooperative Farms

REGIONS	PIGS				FOWL			
	Under 6 months (1)	Sows and Gilts (2)	Other over 6 months (3)	Total (4)	Cocks (5)	Cockereills (6)	Hens (7)	Pullets (8)
U M B E R S								
Western		8	4	12	226	63	236	216
Central	11	9	2	22	4	66	105	65
Eastern	1,111	482	38	1,631	156	506	1,911	1,274
Volta	-							
Ashanti	-				34	99	187	80
B/Ahafo	-				80	8	435	105
Northern	-							
Upper	-							
TOTAL/ GHANA	1,122	499	44	1,665	500	742	2,874	1,740

Pigs, Fowls, and Other Livestock, 1964

FOWL			OTHER LIVESTOCK			
Growers (9)	Chickens (10)	Total (11)	Guinea Fowls (12)	Ducks (13)	Geese (14)	Turkeys (15)
-----N U M B E R S-----						
34	875	1,650	11	18		
		240				
618	36	4,501	20	63		12
		-				-
62	95	557		14		20
176	58	862				
		-				-
		-				-
890	1,064	7,810	31	95		32

APPENDIX TABLE XV: Ghana, Cooperative

REGIONS	Cases with Irrigation (b)	SOURCES OF WATER FROM			METHOD OF IRRIGATION WITH		Cases
		RIVER	WELL	DAM/POND	WATERING CAN		
		(1)	(2)	(3)	By hand (4)	By gravity (5)	
	Cases	-----A C R E S-----					
Western	4	32	2		34		
Central	8	2	10		12		
Eastern	7	38	35	2	73		
Volta	4	13			13		
Ashanti	3	3			3		
B/Ahafo							
Northern							
Upper	2			4	4		
Total/Ghana	28	88	47	6	139		

Farms, Irrigation and Drainage, 1964

METHODS OF IRRIGATION WITH						DRAINAGE	
CHANNELS			PIPES (Rubber or Metal)			Cases with drainage (13)	Area drained (14)
By hand (7)	By gravity (8)	By mechanical pumping (9)	By hand (10)	By gravity (11)	By mechanical pumping (12)		
-----A C R E S-----							
						1	1
		2					
		2				1	1

APPENDIX TABLE XVI: Ghana, Cooperative Farms, Fertilizers, 1964

REGIONS	TYPE OF FERTILIZERS OR CROPS	QUANTITY			PRICE Shillings/ Cwt	VALUE*	AREA TREATED Acreage	AREA UNDER CROPS Acreage
		United	Number	Weight Cwt				
Western	1. Sulphate of Ammonia	Bags	10	10	26/-	13	22	7,304
Central	1. N.P.K. 2. Super Phosphate	Bags	144	144	26/-	187	235	853
Eastern	1. Sulphate of Ammonia 2. Super Phosphate 3. N.P.K.	Bags	255	255	26/-	332	808	3,609
Volta	1. Sulphate of Ammonia 2. N.P.K.	Bags	20	20	26/-	26	17	1,735
Ashanti	1. Sulphate of Ammonia 2. Com- pound Fertilizer 3. Field Fer- tilizer 4. Mixed N.P.K. 5. Com- pound N.P.K.	Bags	331	331	26/-	430	470	2,513
B/Ahafo	1. Sulphate of Ammonia 2. Super Phosphate	Bags	625	625	26/-	812	346	1,801
Northern	1. Sulphate of Ammonia 2. Super Phosphate	Bags	150	150	26/-	195	1,315	3,410
Upper	1. Ammonia and Phosphate	Bags	109	109	26/-	142	165	2,246
Total for Ghana			1,644	1,644	26/-	2,137	3,378	23,771

APPENDIX TABLE XVII: Ghana: Cooperative Farms, Labor Organization, 1964

REGIONS	ORGANIZED FIELD WORK WITH FIXED WORKING DAYS			OPERATIONAL LABOR PRACTICE			DISTRIBUTOR OF LABOR			
	No. of Cooper- atives (1)	No. of days per week (2)	No. of hours per day (3)	Jointly (4)	In Groups (5)	As Individuals (6)	Chair- man (7)	Secre- tary (8)	Comm- ittee (9)	Others (10)
	No.	days/week	hrs./day	c a s e s			c a s e s			
Western	163	2.2	6.4	130	23	43	112	47	2	35
Central	92	2.0	6.4	73	15	6	71	10	10	3
Eastern	109	2.0	5.9	69	37	21	68	41	6	12
Volta	48	2.1	6.5	44	19	1	35	7	19	3
Ashanti	147	2.3	6.9	142	20	28	109	35	2	44
B/Ahafo	62	1.7	5.4	56	12	18	54	8	15	9
Northern	26	2.2	6.8	47	31	22	85	2	2	11
Upper	66	2.5	8.0	42	31	62	82	2	-	51
TOTAL/ AVERAGE	713	2.2	6.5	603	188	201	616	152	56	168

APPENDIX TABLE XVIII: Ghana:

REGIONS	PLACE OF MARKETING		No. of cases	WHOLESALE TO					RETAIL SALE
	Locally (a)	Elsewhere (b)		Food Marketing Board (3)	Commercial Firms (4)	Institutions, Sch., Colleges, Unvers. (5)	Private Traders (6)	Others specify (7)	No. of cases (8)
	----- C A S E S -----								
Western	49	6	8		3	1	6		43
Central	47	5	13	2	1	1	13		33
Eastern	88	9	42	7	4	2	23	3	51
Volta	35	2	15	4			8	7	24
Ashanti	125	27	94	32	1	1	73		78
B/Ahafo	56	7	33	9			29	3	30
Northern	94	1	51	4			24	23	79
Upper	88	8	79	5	1		43	33	35
Total for Ghana	582	65	335	63	10	5	219	69	373

Cooperative Farms Marketing, 1964

MARKETING PROBLEMS						DEFRAYING EXPENSES BY			PROFIT SHARING	
No. of cases	Bad Roads/Lack of Rds	Lack of Transport- ation	Lack of Storage Facilities	Lack of Demand/ Low Prices	Others	Sale of Produce	Subscription	Government Loan	Proportional to value/work	Equally to Member- ship
(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
----- C A S E S -----										
25	11	14		1		31	153	19		5
13		10		3		40	79		4	27
42		14	1	31	6	30	105		11	25
13		1		11	1	30	39	2	16	12
45	3	14	5	32		100	156	7	4	9
37		2	1	36		43	62	15	12	23
16		5		12		86	23	9	12	73
12		11		2		92	49	3	55	57
203	14	71	7	128	7	452	666	55	114	231