STRUCTURAL ADJUSTMENT AND AGRICULTURE IN GHANA

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1. Introduction

The paper focuses on the analysis of the impact of the Economic Recovery and Structural Adjustment Programmes (ERP and SAP) launched in 1983 and 1986, respectively, on the performance and future expectations of agricultural development and welfare of farm households in Ghana. The paper presents in section two, highlights of the Ghanaian economy in general, and agriculture in particular, in the decade immediately preceding the launching of the programmes. This is followed in section three by an overview of the programmes, emphasizing the major policy reforms, structural changes and objectives. In section four is a brief presentation of the structure of the agricultural sector, its contribution to the economy, growth rates and some of the major development problems and constraints. The focus of section five is on agricultural sector policy reforms, particularly, price controls, privatization of input supply and distribution, formal agricultural credit system, etc. Some macroeconomic policy changes which directly impinge on the performance of agriculture are also discussed, particularly, trade liberalization and exchange rates. In section six the strategy to develop the agricultural sector in the medium term (1991 to 2000) is discussed. The impacts of the sectoral and some of the macroeconomic policy reforms on employment and incomes of those engaged in agricultural activities, and rural poverty, are discussed in section seven. Conclusions and recommendations are presented in the final section eight.

2. The Economy in the Decade before ERP and SAP

At the time of independence from British rule in March 1957, the economy of Ghana was prosperous and among the strongest in sub - Saharan Africa. The per capita income was the highest among the countries in West Africa which at that time would have placed it among the middle income

countries by today's standards (Dapaah, 1987). The economic prosperity stemmed mainly from wealth accumulated through export of primary products, particularly cocoa, which Ghana was the world's leading producer for over four decades before independence. In spite of maintaining the leadership position in cocoa export till the late 1970s, the economy began to deteriorate, notably, from the early 1970s and reached a crisis stage in the early 1980s (see Appendix). During this period, the gross domestic product (GDP) declined by about 0.5% per annum; real per capita income fell by about 30% and real wages by about 80%. Domestic savings dropped from about 12% to 3% and investment rate fell from about 14% to 2% of GDP. The output in all sectors of the economy declined considerably. The capacity utilization of the manufacturing sector which was once flourishing, fell to about 20 - 25% and value added in real terms accounted for only 8% of GDP compared with 14% in 1970 (Ewusi, 1989). Government revenue covered only about one - third of total expenditure and budget deficit increased from about 0.4% to 14.6% of GDP. There was rapid expansion of money and quasi - money supply which fuelled inflation in the country. The rate of inflation became very high reaching triple digit in some years (1977, 1981 and 1983). There was a high level of speculative hoarding of "essential commodities" and selling through the backdoor at exorbitant prices, several times over government controlled prices which were kept very low. The currency was highly overvalued and induced relatively high level of imports and low volume of exports which worsened the balance of payments position. Real export earnings declined by about 52%, falling from about 21% of GDP to 4%. Import volume fell to about 35%. There was a flourishing parallel market in foreign currency. While the official exchange rate was 2.75 to US$1.00, the parallel market rate reached about 62.00 in 1982 (see Appendix).

The period of economic decline was characterized by political and economic instability largely due to frequent and often violent changes in government through military coup d'états of which there were four during the decade. These were often accompanied by confiscation of assets, freezing of bank accounts, trials in hastily established courts and other forms of harassment of local and foreign investors as well as those with large savings in local banks. The frequent changes of government resulted in a lack of coherent and consistent set of policy measures as each new government tried to dissociate itself from the major policies pursued by the previous govern - ment. The situation also contributed immensely to the destruction of savings culture and attraction for both local and foreigners to invest in the country.

Some other government polices such as price controls which resulted in

poor allocation of scarce resources; increased public sector role in the economy; public investments in non-productive activities; neglect of basic social services, and lack of infrastructural maintenance and rehabilitation also contributed to the decline of the economy. There were also some external factors which precipitated the deterioration of the economy, such as i) a long period of decline in world market prices for primary products which dominated Ghana's exports; ii) sharp rises in interest rates in international financial markets; iii) oil price shocks of 1973-1974 and 1979-1980; iv) persistent drought and bush fires which climaxed in 1983, etc. (Smith, 1988).

The agricultural sector was directly affected by several of the negative attributes of the economy during the period preceding the ERP. The cumulative effect showed up in the decline of production of all agricultural tradable and non-tradable. The production of cocoa, for example, declined by about 58% from 1974 to 1983, cereals (maize, rice, millet and sorghum) by about 54%, cotton by about 96%, starchy staples (yam, cassava, cocoyam and plantain) by about 62% and tobacco by about 80%. Per capita food production declined by about 28% between 1970 and 1982. Ghana's food self sufficiency ratio which was about 83% during 1964-66 period declined to 71% in 1978-80 and to 62% in 1982. The average Ghanaian family was estimated to have consumed about 30% less food in 1982 than in 1970 (World Bank, 1984 p.58). The open market food prices soared while controlled prices on selected "scheduled" commodities were kept very low and thereby depressing producer prices. This resulted in the smuggling of part of the reduced production to the neighbouring countries of Côte d'Ivoire and the Republic of Togo. Farm incomes became depressed as well which resulted in a high incidence of rural poverty, rural-urban migration, notably, the educated youth and leaving the aged and particularly, women in farming. Trade restrictions accorded high levels of protection for local production resulting in consumers paying prices several times the world market prices.

3. Overview of the Economic Recovery and Structural Adjustment Programmes

By April 1983 when the ERP was launched, the country was in a severe economic and financial crisis and needed drastic policy reforms to turn it around. The government therefore accepted the World Bank prescriptions packaged in the ERP and SAP. Underlying the ERP was a stabilization policy which was aimed at providing incentives to stimulate i). private

investment in the productive sectors of the economy, ii). exports by realigning relative prices, including exchange and interest rates and iii). supply of needed inputs. The programme was also aimed at improving government finances. Among the specific objectives of the ERP were: -

a) to restore incentives to increase and sustain the production of food, industrial raw materials and export commodities;

b) to increase the availability of essential consumer commodities and improve the distribution systems;

c) to increase the overall domestic availability of foreign exchange, improve its allocation mechanism, and channel it into selected high priority activities;

d) to lower the rate of inflation, reduce the budget deficit and improve the balance of payments position by prudent fiscal, monetary and trade policies;

e) to rehabilitate the physical infrastructure of the country.

The ERP achieved some success but brought to light some major structural problems of the economy. Exports, particularly cocoa, remained below historical levels. The weakness of the financial system hindered the mobilization of savings and the resurgence of private investment. Production was well below potential, particularly, agriculture. Public administration was still weak, partly because senior staff were underpaid and the "brain drain" continued unabated, while there were too many employees at lower levels (World Bank, 1991). In view of these and other problems and in order to lay a solid foundation for sustained growth, the government in 1986 broadened the reform effort by implementing a programme of Structural Adjustment (SAP).

The objectives of the SAP among others were:

i) to attain a 5% average annual rate of GDP growth in order to improve real per capita income by about 2.5% per annum after adjustments have been made for population growth.

ii) to bring down inflation to about 8% by 1990.

iii) to maintain balance of payment surpluses averaging about US$110 million per year to enable Ghana to pay off all external debt arrears by 1990.

Some of the objectives were not met but the combination of the ERP and SAP which are not exclusive in their implementation has generated some improvement in the performance of some economic activities, including agriculture (see Appendix).

4. The Structural Adjustment Programme and Agriculture

The discussion begins by putting in perspective some aspects of the structure of the agricultural sector.

4.1 The Structure of the Agricultural Sector

The agricultural sector is arbitrarily divided into five sub-sectors, namely, Crops, Livestock, Fisheries, Forestry and Cocoa. The Ministry of Food and Agriculture is responsible for the Crops, Livestock and Fisheries sub-sectors; the Ministry of Lands and Natural Resources is responsible for the Forestry sub-sector and the remaining Cocoa sub-sector is under the Office of the President. The entire agricultural sector has been dominated by small scale private enterprises. It is estimated that there were about 1.4 million farm households in the country in 1990 (MOFA, 1990). The available data in 1986 indicate that about 60% of the farm holdings measured not more than 3 ha, about 87% did not exceed 5 ha and only about 13% exceeded 5 ha. Some large scale State Farms developed in the early 1960s and public cocoa plantations set up in the late 1970s have been privatized or abandoned, partly for political reasons, mismanagement, low productivity, drain on government budget, etc.

The productivity of land and labour in the small scale agriculture is generally very low as shown in Table 1. For most of the crops, the average yield for the period 1987 to 1991 was about 25-50% of yields achieved in isolated cases. The low productivity is due largely to extensive use of traditional technology and methods of cultivation. Shifting cultivation and bush fallow have remained the dominant systems for restoration of soil fertility. The use of modern inputs such as fertilizers, pesticides, improved seeds and other planting materials, etc., is not widespread and simple cutlass (machete), knives and hoes are the dominant tools for cultivation and harvesting. The use of drought power is uncommon and confined to the northern savanna zone due to the problem of tsetsefly in the forest zone. Many of the fields are prepared by slashing and burning the vegetation in-situ (zero tillage). Mixed cropping predominates the crop layout in the field, particularly where production is mainly for subsistence. Moisture for plant growth is supplied mainly from unreliable rainfall which is bimodal in the forest and transitional zones and monomodal in the northern savanna zone. Farming activities are highly labour intensive with the bulk of the labour supplied by the farm households. There is a steady trend of farm labour

becoming scarce and costly. The use of institutional credit is low. The predominantly small scale producers are mostly illiterate, aged and women and children. Incomes of the farm households are very low and place most of them among the poor and hard core poor in the country (Boateng, E.O. et al, 1990). About 25% of the predominantly small scale farmers produce mainly for subsistence, 55% sell up to 50% and the remaining 20% market most of their output. Many of the farmers re-enter the market to purchase food during the lean period at high prices.

4.2 Performance of the Agricultural Sector

4.2.1 Contribution to the Economy and Growth Rate

The agricultural sector has been the back bone of the Ghanaian economy for several decades and the situation is not expected to change significantly in the short to medium term. Besides being the largest in the economy, the sector contributes the highest proportion or significantly to several important economic variables. However, in all cases, the contributions have been declining under the ERP and SAP. The contribution to GDP declined from about 53.4% in 1984 to about 42.4% in 1992, falling behind the contribution made by the services sector. The sector contributes to government revenue mainly through duties paid on exports of agricultural commodities, particularly, cocoa. This contribution also declined steadily from about 26%

Table 1: Average and Achievable Yields of Major Foodcrops, 1987-91 (MT/HA)

Crop	Average Yield 1987-1991	Achievable*	%Achieved
Maize	1.2	5.0	24
Rice	1.2	3.0	40
Sorghum	0.7	2.5	28
Millet	0.7	2.0	35
Cowpea	0.9	2.0	45
Cassava	7.8	28.0	28
Yam	6.1	10.0	61
Cocoyam	5.6	8.0	56
Plantain	7.1	10.0	71
Oil palm	5.8	10.0	58
Cotton	0.5	1.5	33
Tobacco	0.9	2.0	45
Pineapple	3.0	5.0	60
Coconut	6.5	10.0	65

Source: MOFA(1990), MTADP, Accra; and Min Of Agric (1991) Agriculture in Ghana, Facts and Figures, PPMED, Accra.

* Yields that have been achieved in isolated cases on farmers fields.

in 1987 to about 10% in 1992. A very important contribution of the sector has been in foreign exchange earnings. In 1986, cocoa alone earned for the country about 67% of the total. It then declined steadily to about 29% in 1992. Agriculture's contribution to foreign exchange earned through non-traditional exports also declined from about 63% in 1988 to about 32% in 1992. The sector's contribution to food supply still falls short of producing enough rice, beef, fish, edible oils, sugar and other food items to meet the increasing demand from population growth and other factors such as increased incomes and change in taste. In 1990 Ghana was about 70% self sufficient in cereal production, 60% in fish, about 25% in meat and less than 20% in the production of raw materials for agro-based industries (MOA, 1990). It is envisaged that if agricultural growth rate does not reach 4% by the year 2000, there would be about 778,000 mt of food deficit (MOFA, 1990).

The sector's growth rate averaged about 2.6% per annum in the period 1987-91 against about 6.3% for the industrial sector and about 7.5% for the services sector (ISSER, 1993). It has been concluded that in spite of the positive response to the ERP and SAP, the agricultural sector has not been able to maintain the momentum of the recovery (MOA, 1992).

4.2.2 Output

The output of agriculture has been characterized by a considerable year to year fluctuations but generally declined since the early 1970s and reached the lowest level in the early 1980s. The output in 1983 was the lowest since 1970. The output of many crops recovered quite significantly under the ERP and SAP such that by the early 1990s, the levels exceeded those in the early 1970s. The exceptions were cocoyam, plantain, cocoa, tobacco and oil palm (Table 2a). The population of livestock as well as fish catch increased but were still not adequate to meet the increasing demand (Table 2b).

Table 2a: Production of Major Crops 1972-92 (3-Year Averages)

Period	Quantity (MT)							
	Maize	Millet	Rice	Cassava	Yam	Cocoyam	Plantain	Cocoa
1972-74	439	121	68	3104	738	1260	1922	380
1975-77	301	130	83	2009	606	865	1143	334
1978-80	327	108	93	1992	599	706	830	251
1981-83	299	78	52	2088	682	660	639	206
1984-86	613	118	68	4752	1071	1480	1553	196
1987-89	638	182	83	3115	1222	1109	1106	239
1990-92	739	109	101	4693	1947	1105	1019	277

Source: Files of Ministry of Food and Agriculture, PPMED, Accra.

Table 2b: Livestock Population (000 Heads) and Fish Catch (000 MT), 1980-92

Year	Cattle	Sheep	Goats	Pigs	Poultry	Fish
1980	877	1,449	1,304	244	7,533	
1981	904	1,821	1,821	263	6,056	
1982	924	1,482	1,215	270	4,875	
1983	1,002	1,750	1,539	317	5,949	
1984	1,078	1,977	1,678	399	5,893	
1985	1,065	1,987	1,605	413	10,024	
1986	1,135	1,814	1,633	469	6,409	
1987	1,171	1,988	1,901	534	8,214	386
1988	1,126	2,046	1,991	478	8,040	361
1989	1,136	2,212	2,364	559	8,787	347
1990	1,145	2,224	2,018	474	9,990	389
1991	1,195	2,162	2,194	454	10,572	347
1992	1,221	2,146	2,221	436	11,887	360

Source: MOFA, Veterinary Service, Accra (Files).

4.3 Agricultural Development Problems and Constraints

The discussions in the preceding paragraphs have highlighted some of the constraints and problems of agricultural development in the country mainly from the perspective of field production. There are several other problems and constraints which are related to marketing of both outputs and inputs. Ghana is said to have comparative advantages in the production of several crops at the farmgate but loses them at the wholesale level through inefficient marketing systems. Transportation alone is estimated to contribute about 50% of the total marketing margin; storage losses are very high estimated at between 15 and 30% among the different crops and there is virtually no processing (value added) of many of the farm produce as they move from the farmer to the ultimate consumer.

The state of the domestic marketing systems resulted in depressed farmgate prices of output, inadequate and untimely availability, poor distribution network and relatively high prices of inputs. The poor marketing systems are partly blamed on inadequate and poor infrastructure, particularly, rural road network and condition, and storage facilities.

There are still other problems confronting agricultural development: These include inadequate access to bank credit, high interest rates, weak extension service and weak linkage between research, extension and farmer,

etc. World Bank (1992) has indicated that the key to accelerated growth and increased competitiveness in agriculture lies in improving the incentive framework, maintaining a market-based exchange rate, removing remaining trade restrictions, reducing export levies on cocoa and improving marketing efficiency through free pricing and greater competition. There is also great scope for reducing production and marketing costs through public investment in transport and communications infrastructure.

5. Agricultural Policies and Reforms under SAP

Several of the problems and constraints facing agriculture are being addressed by some sectoral policy reforms in addition to some macroeconomic policy reforms. A special agricultural sector adjustment programme (ASAP) has two main sets of objectives:

a) to reform agricultural pricing and marketing policies in order to improve resource allocation, to foster private initiative and, through greater competition, to develop greater efficiency.

b) to strengthen agricultural sector coordination and management, and provide for a better allocation of public resources in order to reduce waste, alleviate poverty and reduce environmental degradation.

Among the sectoral and the relevant macroeconomic policy reforms are:

i) Elimination of price controls.
ii) Privatization of input supply and distribution.
iii) Introduction of competition in the internal purchasing of cocoa.
iv) Promotion of non-traditional agricultural exports.
v) Interest rate liberalization and abolishing special consideration for the agricultural sector.
vi) Streamlining the activities of Ghana Food Distribution Corporation and to operate on purely commercial basis.
vii) Liberalization of external trade except cocoa.
viii) Realignment of the cedi exchange rate.

5.1 Elimination of Price Controls

The elimination of price controls has led to abolishing guaranteed minimum prices (GMP) for selected food and industrial crops as well as subsidies on agricultural inputs and food consumption.

Prior to 1983, the government intervened in input prices as well as both

producer and consumer prices of selected agricultural commodities. The producer prices were set for the traditional export crops, namely, cocoa, coffee and sheanut; and GMP were set for selected foodcrops and industrial raw materials such as maize, rice, cotton, tobacco, oil palm, etc. The GMPs were administered through public buying agents; Ghana Cocoa Board (Cocobod) for the export crops; Ghana Food Distribution Corporation (GFDC) for foodcrops and the processing and other institutions for industrial crops.

Consumer price interventions were eliminated in the period 1983-85. The input subsidies were phased out over a period of three years which ended in 1990 and in the same year, the GMP was abolished. The abolishing of the GMPs is not likely to make any visible impact on farmgate prices as they were almost always lower than the open market prices offered by private traders. However, available data (Table 3) show that the GMP was increased considerably in the period 1982 to 1989 over and above the farmgate prices but during the period, the proportion of the marketable surplus purchased by the GFDC declined from an average of about 10% to less than 5%. This was partly due to financial constraints and losses made by buying at the substantially raised GMPs. The prices of all foodcrops are now determined in the open market by the interaction of demand and supply forces. The prices of industrial crops are determined by direct negotiation between producers who act in groups and buyers (processors).

Table 3: Guaranteed Minimum Price (GMP) and Farmgate Price (FGP) of Maize, 1979-87

Year	GMP (Cedi/MT)	FGP (Cedi/MT)	GMP as % of FGP
1979	80	102	78.4
1980	100	260	38.5
1981	165	363	45.5
1982	500	472	105.9
1983	1,800	1,377	130.7
1984	1,000	648	154.3
1985	2,000	1,050	190.5
1986	2,600	1,575	165.1
1987	4,200	3,600	116.7

Source: IFAD, Report of the Special Programming Mission to Ghana, Report No. 0105 -GH, July, 1988.

Cocoa Producer Price

The government has continued to set the panterritorial price for cocoa. However, the policy now is to pay about 50 - 55% of the world market price to the producer. The introduction of competition in the internal purchase of cocoa by licensed buyers is aimed at improving handling efficiency, thereby reducing cost and providing part of the savings to producers in a form of higher prices. Thus, the producer price set by government has become a floor price as buyers are at liberty to offer higher prices by way of competition. So far only a few (about 5) companies have been licensed to buy cocoa alongside the Produce Buying Company (PBC), a subsidiary of COCOBOD, which previously purchased all the cocoa. Competition among the buyers has not yet picked up well enough to compel payment of prices higher than what is set by government.

In fact, the declining production of cocoa since 1990 indicates that the cocoa pricing strategy has not been effective, that is, the price is still not right. The nominal price has increased quite a bit, but the real price continued to decline since it reached a recent peak in the 1987/88 season (Table 4). A low producer price affects cocoa production through a number

Table 4: Cocoa Purchases, Nominal and Real Producer Prices, 1972/73 - 1991/92

Season	Purchases (000 mt)	Nominal Price (Cedis/mt)	Real Price (1972 Prices)
1972/73	407	366	366
1973/74	340	439	374
1975/75	376	489	354
1975/76	396	585	333
1976/77	323	732	263
1977/78	271	1,333	220
1978/79	265	2,667	252
1979/80	296	4,000	237
1980/81	258	4,000	147
1981/82	224	12,000	211
1982/83	179	12,000	172
1983/84	158	20,000	125
1984/85	175	30,000	136
1985/86	219	56,600	235
1986/87	228	85,000	291
1987/88	188	150,000	357
1988/89	300	165,000	317
1989/90	295	174,400	271
1990/91	293	224,000	258
1991/92	243	251,200	245

Sources: Stryker J.D. (1990); Sijm, J. (1993),COCOBOD,Accra.
* provisional

of ways including a low rate of establishing new farms, replanting and rehabilitating old ones, poor maintenance of farms, and smuggling of cocoa to the neighbouring countries.

Input Subsidy

Among the major incentives for the use of improved and modern inputs in the predominantly traditional Ghanaian agriculture was direct and indirect price subsidy. The prices of all inputs and services handled by public agencies were directly subsidized until 1990. The inputs included fertilizer, improved seed, interest rate on bank loans, and for cocoa in particular, insecticides, spraying machines and the simple hand tools used in its cultivation. There was a time in the late 1970s when government supplied labour for weeding cocoa farms and charged 50% of the going wage rate. Other subsidies were in the form of reduced or no tariffs on all agricultural inputs imported for direct use or distribution by the private sector. The subsidies have been abolished because of distortion effects on the use of scarce resources and the substantial financial burden on government expenditure.

As alluded to earlier, the use of purchased inputs in Ghana's predominantly small scale and traditional agriculture has been very low even when they were subsidized. Total consumption of chemical fertilizers, for example, never exceeded 50,000 mt per annum and the average per ha below 5 kg. The fertilizer was mainly used in the cultivation of maize, rice, tobacco, cotton and vegetables. At the time that the phasing out of the subsidy regime was implemented in 1986 the subsidy rate was about 56%. It was reduced to 42 % in 1987, 30% in 1988, 15% in 1989 and 0% in 1990. The resulting increase in prices are shown in Table 5.

Charging the real input price to farmers was expected to be matched by increased output price following the deregulation of the output market. However, the match has not been perfect, at least in the short run, as the input prices have increased faster than the output prices. For example, the ratio of maize and fertilizer prices which was about 1.59 kg of maize to 1 kg of nutrients in 1986 changed to about 4.70 kg of maize to 1 kg of nutrient in 1989. The ratio, however, dropped to 2.98 kg in 1992 due to MOFA selling its fertilizer stocks at the same price for three consecutive years, implying implicit subsidy (Table 6).

The removal of subsidies has resulted in a substantial reduction in demand for all the previously subsidized inputs as illustrated in Table 7. In

Table 5: Fertilizer Prices and Subsidies, 1986 - 1992

Year	Compound Fertilizers (Cedis/mt)a/	Annual Change(%)	Straight Fertilizers (Cedi/mt) b	Annual Change(%)	Subsidy (Percent)
1980	300	-	240	-	65
1981	600	100	500	108	45
1982	600	0	500	0	45
1983	1,160	93	900	80	45
1984	8,800	659	5,900	556	-
1985	8,800	0	5,900	0	56/62
1986	15,600	77	9,800	66	36/56
1987	27,600	77	25,400	159	42
1988	46,000	67	32,000	26	30
1989	67,000	46	47,000	47	15
1990	84,000	25	62,000	32	0
1991	84,000	0	62,000	0	0
1992	84,000	0	62,000	0	0

Source: Crop Services Department, Ministry of Agriculture, Accra.
a/ 15 - 15 - 15 and 20 - 20 - 0 b/ Ammonium sulphate

Table 6: Fertilizer/Maize Price Relationship, 1983 - 92

Year	Maize Price (a) (Cedis/Kg)	Fertilizer Price (b) (Cedis/Kg)	Kg of Maize to pay for Kg of nutrient
1983	24.40	0.91	0.04
1984	11.80	7.35	0.62
1985	18.25	24.80	1.40
1986	27.10	43.00	1.59
1987	51.20	71.70	1.40
1988	45.50	127.10	2.80
1989	40.50	191.00	4.70
1990	69.80	240.50	3.40
1991	70.00	240.50	3.40
1992	81.20	240.50	2.96

Source: Asumming - Brempong (1992).
(a) Average maize price during August - October (low price period when most farmers sell)
(b) Average price of nutrient of 15 - 15 - 15 and ammonium sulphate.

Table 7: Quantities Purchased and Prices of Selected Inputs, 1986 - 92

Season	Insecticide		Spraying Machines	
	Price C/Liter	Quantity 000Liters	Price C/unit	Quantity Units
1986/87	600	1,387	5,000	13,221
1987/88	600	1,094	23,000	8,857
1988/89	600	902	23,000	3,530
1989/90	2,585	566	75,160	5,015
1990/91	2,585	286	75,160	513
1991/92	2,585	159	75,160	514

Source: Ghana Cocoa Board, Cocoa Services Division, Accra

the case of fertilizer, the removal of subsidy has also shifted its use from mainly cereals (maize and rice) to pineapple which is being traded in international markets.

5.2 Privatization of Input Supply and Distribution

Until 1983, some specific agricultural inputs and services were distributed only by public sector institutions. The Ministry of Food and Agriculture (MOFA) was responsible for the supply and distribution of several types of inputs to foodcrop and livestock farmers and fishermen. The distribution of inputs and services to cocoa farmers was the responsibility of COCOBOD while inputs and service for the production of industrial crops were provided by public and other institutions which were set up to promote their production.

The supply and distribution of inputs to cocoa farmers and industrial crops producers are still handled by COCOBOD and the respective institutions. However, plans are very well advanced to privatize the supply and distribution of inputs for cocoa production. Since 1986 the supply and distribution of inputs and services to foodcrop farmers by MOFA have been progressively privatized. The privatization policy precipitated the abolishing of the Ghana Seed Company (GSC) (formed in 1979) in 1986. However, a skeleton staff stayed on in order to distribute a large stock of seed until October, 1989 when the GSC was completely closed down. The objective of the privatization policy was to establish a competitive private market that will

ensure availability and timely delivery of inputs at the farmgate. It is envisaged that competition would induce efficiency in distribution, lower costs and increase benefits to farmers in terms of lower prices.

The privatization of supply and distribution of fertilizers began in 1989 with the registration of 351 retailers. The number increased to 866 in 1992. However, only about 20% have been active and mainly operate in the regional and district capitals and towns, remote from the farming villages. In the short run therefore, the availability of purchased inputs particularly, fertilizers at the farmgate has been worsened and partly account for the reduced demand for fertilizers.

Only four wholesalers have been registered since 1991 to import and distribute fertilizers and only two have remained active and imported fertilizers in 1993. The sluggish response to the privatization of fertilizer supply and distribution as well as other inputs and services is partly due to financial problems, and government continued participation and selling below market prices.

5.3 Trade Liberalization

The trade liberalization policy is discussed in two parts, internal trade and external trade.

5.3.1 Internal Trade

Prior to the launching of the ERP and SAP, some public agencies were directly involved in buying and/or selling agricultural produce in the domestic market. The Ghana Food Distribution Corporation traded alongside private traders, buying and selling all kinds of locally-produced food commodities both processed and unprocessed. Besides implementing the guaranteed minimum price (GMP) policy, the GFDC was to offer marketing outlet for producers throughout the country, particularly those located in remote areas where private traders would avoid. The policy was to ensure adequate incentives for the production of marketable surplus everywhere in the country. The GFDC was therefore not operating on purely commercial grounds. The operations of the GFDC have been streamlined under the SAP. It now buys and sells at market prices with profit maximization as its principal goal. The change in operational policy would leave producers in remote areas with poor feeder roads without assured market outlets.

One major addition to GFDC activities has been to offer its storage

facilities located around the country for use by private traders, farmers and others at a fee. The policy reform which began in 1993 is aimed at reducing the high proportion of post-harvest losses in the country, ensuring relatively uniform supply of locally-produced food in the domestic markets and stabilizing producer prices at higher levels and consumer prices at lower levels. While farmers traditionally accounted for the bulk of farm produce stored in the country in ineffective traditional structures, traders hardly stored any of the commodities they handled for a longer period. It is these traders and not farmers who are now utilizing the GFDC storage services; the farmers have continued to use their own ineffective traditional structures. The policy would shift the storage of the bulk of local produce from farmers to traders and result in reduced storage losses.

Competition in Internal Purchase of Cocoa

Up to 1992, the entire output of cocoa was purchased on behalf of COCOBOD by the Produce Buying Company (PBC), a subsidiary of the COCOBOD. As part of the strategy to increase the producer price over and above what is set by government, competition has been introduced into the internal purchase of cocoa since 1992. The policy reform is expected to improve efficiency in handling, reduce cost, and part of the savings passed on to farmers in higher prices as buyers compete for the produce. The effect of the policy change will however, be apparent only in future years, as the few licensed buyers have been paying the price set by government.

5.3.2 External Trade

Exports

To address the chronic balance of payments deficit the government has sought since 1986 to widen the export base by promoting non-traditional exports. This has included several agricultural commodities. The number has fluctuated from 50 to 61 commodities per annum since 1986. The promotion of non-traditional exports has resulted in increased production of some crops, notably, horticultural crops (pineapple), and others such as cotton seed, kolanut, yam, coconut and vegetables/condiments.

Imports

The aspect of the trade liberalization policy which has had the most impact on agriculture is imports. As mentioned elsewhere, Ghana has comparative advantage in the production of several crops at the farmgate but loses it in the urban markets due to inefficient marketing systems, poor road network and also the poor condition of the existing roads. Thus, locally-produced agricultural commodities have not been able to compete with cheap imports which are traded in the major consuming markets. The production of commodities such as rice, chicken, beef, textiles and, edible oils, etc have, particularly, suffered.

The consumption of local rice has been limited to areas close to where it is produced. Producers in areas which depend on Accra, the capital city, for market have been pushed out of production because of complete loss of market to imported rice; for example, the Affife and Dawhenya Rice Projects have collapsed. The projects were located in those areas in order to provide economic base for the poverty stricken households in the area.

5.4 Exchange Rate Adjustment

Exchange rate realignment through massive devaluations of the cedi which began in 1983 was to enable the country to export more of its tradable which should be relatively cheaper and reduce imports which should be expensive. The expected increase in foreign exchange earnings and reduction in import bills were to enable the country to achieve balance of trade payments. Although the values of export increased by nearly 32% from 1986 to 1992, the corresponding values of imports were consistently higher resulting in increased balance of payments deficits (see Appendix). Thus, the primary purpose of the devaluation which continues virtually on daily basis has not been achieved yet.

The foreign exchange earned through cocoa exports, a major earner, declined by about 40% between 1986 and 1992, decreasing from about US$ 503. 3 million to US$ 302.5 million. The earnings through the non-traditional agricultural exports increased to a peak of about US$ 40 million in 1991 and dropped by about 35% in 1992. The value of timber however increased consistently from about US$ 44 million in 1986 to US$ 124 million in 1991 but it dropped by about 8.3% in 1992. Since 1991, minerals have become the major foreign exchange earners for the country, the value rose from about US$ 124 million in 1986 to US$ 389 million in 1992.

The exchange rate realignment, however, enabled the government to increase the nominal producer price for cocoa which for a period provided adequate incentives for increased production. But the increase in the nominal price has not been high enough to sustain the real price largely due to duties on cocoa export.

The adjustment in the cedi exchange rate has encouraged exports of some non-traditional agricultural commodities than the traditional ones (Tables 8 and 9). Among the non-traditional commodities, those that are being exported in reasonably large quantities are quite few, namely, kolanuts,

Table 8: Quantities of Major Non-Agricultural Commodities Exported, 1988 to 1992 (MT)

Commodity	1988	1989	1990	1991	1992
Kolanuts	5836	7483	7403	6990	10038
Pineapple	4907	7950	9440	10675	9754
Cotton seed	4400	3595	1250	4063	8910
Natural rubber	953	2155	3566	5505	na
Yam	704	1635	2122	3051	2728
Palm kernel	655	1277	520	3942	1908
Maize	-	-	-	490	436
Cocoyam/Products	14	62	318	412	335
Vegetables/Condiments	83	13	19	240	320
Cashew nut	-	-	-	30	51
Assorted Fruits	76	95	324	*	na
Tuna Frozen	-	-	-	18691	4985
Processed Fish	-	-	-	-	403
Lobster/Shrimps/Prawns	-	-	-	211	173
Shark Fins	-	-	-	11	15

Source: Ghana Export Promotion Council, Accra.
* less than 1 mt.

Table 9: Quantities of Major Traditional Agricultural Exports, 1986-1992 (MT)

Commodity	1981	1986	1987	1988	1989	1990	1991	1992
Cocoa dry beans	240	193	204	155	281	227	245	254
Butter	na	7	6	7	5	8	6	8
Liquor	na	3	4	7	7	6	6	7
Cake	na	8	8	8	4	8	4	9

Source: Ghana Cocoa Board, Accra.

pineapple, cotton seed, natural rubber, yam, palm kernel and tuna fish (frozen). The quantities traded, and their values however, are still quite small as compared with the traditional commodities, particularly, cocoa.

5.5 Agricultural Credit

Until 1990 the formal banking institutions were as a matter of policy obliged to lend not less than 25% of their loanable funds to the agricultural sector and at reduced interest rates. The special dispensations for the sector were abolished in 1990. Subsequently, the agricultural sector interest rates were raised and since 1989 they have been higher than or equal to the interest rates charged on loans made to the other sectors of the economy (Table 10). The available data show that the proportion of loanable funds to the agricultural sector decreased from about 20% in 1987 to less than 10% in 1992. (Table 11). This is not a healthy sign for agricultural development in the country, particularly, as farmers need loans more than ever before to pay for the substantially increased input prices.

Table 10: Interest Rates on Bank Loans, 1984-92

Year	Agricultural Sector	Others Sectors
1984	16.00	20.00
1985	18.50	20.50
1986	22.50	23.00
1987	22.75 - 30.00	25.00 - 30.00
1988	23.00 - 30.00	20.00 - 30.25 a/
1989	22.50 - 30.00	20.00 - 30.50 a/
1990	22.50 - 29.50	20.00 - 30.25 a/
1991	19.50 - 31.50	18.25 - 31.50 b/
1992	19.75 - 26.50	19.75 - 26.50 a/

Source: Rep. of Ghana, Quarterly Digest of Statistics, Statistical Service, Accra (several issues)

a/ Lower interest rate was charged for borrowing for export.

b/ Lower interest rate was charged for borrowing for manufacturing.

Note: With effect from 18th September 1987, a liberalized system of determining borrowing and lending interest rates was introduced by the central bank (Bank of Ghana) for all commercial and secondary banks.

Table 11 Commercial and Secondary Bank Loans to Agriculture (%)

Year	Commercial Banks	Secondary Banks*	Total
1987	22.1	18.6	20.0
1988	16.6	13.2	14.9
1989	15.5	13.4	14.4
1990	15.8	16.1	15.9
1991	13.6	13.0	13.2
1992	11.1	8.7	9.7

Source: Rep.of Ghana, Quarterly Digest of Statistics, Statistical Service, Accra (several issues)

* Secondary banks include Agricultural Development Bank, National Investment Bank, Bank for Housing and Construction, National Savings and Credit Bank, Bank for Credit and Commerce, Merchant Bank (Ghana) Ltd, and Social Security Bank.

Agriculture is at a considerable disadvantage when it comes to commercial interest rate determination and allocation of loans; this is due to the high risk in production, high rate of default in repayment and the high cost of administering loans to the large number and predominantly small scale farmers with inadequate collateral. These are among the factors accounting for the high agricultural interest rates and the decline in the proportion of loans to the sector.

5.6 Protection of Local Production

Agricultural producers in the country are exposed to a number of risks and uncertainties, particularly, the unpredictable rainfall pattern, highly fluctuating producer price, inadequate market outlets, etc.. Some amount of incentives are therefore required for producers to invest substantially in production. In Ghana, production incentives were provided in several forms such as input subsidies, GMP, assured market outlets, lower interest rates, protection of production against cheap imports, etc.

Before the ERP and SAP, agricultural production was protected by policy measures such as the overvaluation of the currency (exchange rate restrictions), import tariffs and or qualitative restrictions, sales tax, excise duties and other taxes as well as government promotional measures that

favoured production and/or marketing and pricing of selected commodities (Jebuni et al 1990). The trade liberalization, import tax and interest rate policy reforms have reduced considerably the level of protection of agricultural production in the country.

The levels of protection for maize and rice, for example, have declined considerably as measured by both net nominal protection coefficient (NNPC) and net effective protection coefficient (NEPC). Cocoa and coffee production have never been protected and continue to be taxed. Seed cotton production has received no protection and oil palm production has not been protected since 1988. The reduced level of protection for the production of some crops should have the effect of discouraging inefficient producers whose activities resulted in poor allocation of resources (Jebuni el al 1990).

6. Medium - Term Agricultural Development Programme

As part of the Agricultural Sector Adjustment Programme (ASAP), a medium - term agricultural development programme (MTADP) was developed and implemented in 1991 to run till the year 2000. The objective of the MTADP was to define a programme of policy and institutional reforms and a complementary set of investments needed to achieve a higher growth rate in agriculture than had been achieved hitherto. The strategy as set out in the MTADP was aimed at a sustained annual growth in agricultural GDP of around 4%. This is the minimum growth rate required if the economy as a whole can be expected to achieve an accelerated growth. The policy reforms under the MTADP are concentrated on i) incentive framework for agricultural production, trade and processing in order to add value by private entrepreneurs; ii) improvement of the sector management to enhance coordination of public expenditure in the sector, and iii) the setting of sectoral priorities in order to channel domestic and external resources to areas of greatest impact.

The policy reforms envisaged under the MTADP were to be accompanied by i) increased public investment in transport and communication infrastructure, especially feeder roads and improved dissemination of market information, and also in small scale irrigation and ii) strengthening of public services in agriculture, particularly, extension, livestock services and research. Other important aspects of the MTADP include: expenditures on forest protection, rural poverty alleviation, especially for women farmers, promotion of more efficient financial markets to support the rural sector

Table 12: Levels of Protection for Slected Agricultural Produce, 1984-88.

Produce	Level of Protection			
	NNPC*		NEPC**	
	1984	1988	1984	1988
Maize				
Traditional	na	1.70	na	1.19
Improved draft	3.49	1.10	3.44	1.33
Improved mechanized	3.49	1.10	3.49	1.36
Advanced draft	3.49	1.10	3.56	1.36
Advanced mechanized	3.49	1.07	3.60	1.33
Rice				
Traditional	8.22	1.47	4.56	1.65
Improved	8.22	1.54	5.66	2.22
Advanced	8.22	1.54	10.55	2.90
Large scale mechanized	8.22	1.54	na	2.31
Irrigated large scale	8.22	1.54	16.03	2.16
Irrigated small scale	8.22	1.54	10.74	2.04
Yam (traditional)	na	0.63	na	na
Cassava (traditional)	na	1.00	na	0.41
Cocoa				
Replanted	-1.8	0.2	-1.73	na
Rehabilitated	-1.8	0.2	-0.73	na
Coffee	na	0.21	na	na
Oil palm (outgrowers)	1.5	0.02	1.57	na
Seed cotton				
Semi improved	-1.62	0.76	-1.64	na
Improved draft	-1.62	0.76	-1.69	na

Source: World Bank (1984); Salinger, L (1986), quoted in Jebuni, et al (1990).

* Net Nominal Protection Coefficient

** Net Effective Protection Coefficient

development, and establishment of legal and institutional mechanisms for standardization of weights and measures and guarantees of free entry into domestic markets (World Bank, 1992).

Internal funding of the MTADP is envisaged to come from sources such as i) reallocating funds away from existing programmes such as large scale irrigation, ii) cancelling a proposed expansion of GFDC storage facilities; iii) reduction in the operation cost of COCOBOD; iv) careful review of intra-sectoral allocations; and v) establishing an effective process of budget review. The major sources of funding are external. The heavy dependence on external sources for funding the implementation of the rather ambitious programme has already become a major constraint as they have remained uncertain.

7. Agricultural Incomes and Rural Poverty

As mentioned earlier, incomes of those engaged in agricultural activities have been among the lowest in the country. The sources of incomes of sections of the population classified as non-poor, poor and hard core poor are shown in Table 13. The data show that 65% and 60% respectively of the poor

Table 13: Sources of Income by Sections of the Population (%)

Income Source	All	Non-Poor	Poor	Hard core Poor
Employment	7.3	8.1	4.4	4.1
Agriculture	55.6	52.9	65.1	60.4
Non-Farm Self-Employment	28.2	29.7	22.8	24.5
Actual and Imputed Rent	1.7	1.6	2.1	2.7
Educational Scholarships	0.7	0.1	0.0*	0.4
Remittances received	4.1	4.1	4.2	5.8
Others	3.0	3.5	1.4	2.4
Total	100.0	100.0	100.0	100.0

Source: Boateng, E.O. (1990) et al
* less than 0.5%

and hard core poor earn their incomes by pursuing agricultural activities, particularly farming. These sections of the population have been defined as follows. Classified as poor are those whose incomes as revealed by expenditure were not more than two-thirds of the national mean and the hard core poor are those whose incomes were not more than one-third of the national mean. In 1988 the national mean income was estimated at about US$ 244.50; the cut off for the poor was about US$ 163.00 and the hard core poor was about US$ 81.50 (Boateng, et al, 1990).

As already shown in Table 4, poverty in Ghana is concentrated in the rural environment where the economically active population in agriculture operate and reside. About 79% of households classified as poor are located in rural communities and the proportion in the hard core poverty group is even higher, about 84%. There are no earlier statistics to indicate trend but since the terms of trade have gone against agriculture, it can be argued that the farm households have become relatively poorer as a result of the ERP and SAP.

The agricultural sector employs the highest proportion of the EAP in the country. Although the proportion has been declining, the sector still employs about 50% of them as farmers, farm labour, fishermen, while others engage in other agricultural related activities. In recent years, many of those who

Table 14: Rural-Urban Poverty in Ghana

Location	Share of Population (%)	Proportion of Population in Poverty (%)	Contribution to national Poverty (%)	Proportion of Population in hard core poverty (%)	Contribution to national hardcore Poverty (%)
Rural	65	44	79	10	84
Urban Excluding Accra	27	27	20	5	16
Accra	8	4	1	0	0
All Ghana	100	36	100	7	100

Source: Boateng, E.O. et al (1990) A Poverty Profile for Ghana. The World Bank Washington, D.C.

have been redeployed (their appointments terminated) in the public sector have gone into farming where incomes are relatively very low.

The EAP employed in agricultural establishments (employing 10 and more people) has been very low. In 1983 they formed about 15% of the employees in all establishments in the country and decreased almost consistently to about 8% in 1990, the decline being relatively faster in the public sector than in the private sector (Table 15). The general decline however shows that less and less EAP are earning incomes from agricultural related activities.

The average income of EAP employed in agricultural establishments has almost always been below the average income in all establishments (Tables 16 and 17). It was however higher than those employed in construction but in 1987 the trend reversed leaving the agricultural average income as the lowest.

Table 15: Employment in Agricultural Establishments, 1975 - 1992 (%)

Year	All Sectors	Private Sector	Public Sector
1975	14.7	3.6	18.4
1976	15.5	3.2	19.3
1977	15.7	2.8	19.9
1978	17.7	3.1	21.9
1979	17.2	3.2	21.0
1980	16.3	8.2	17.4
1981	15.3	6.2	17.0
1982	11.0	8.7	11.4
1983	15.2	12.5	15.8
1984	12.5	11.2	12.7
1985	12.1	10.4	12.4
1986	9.5	8.4	9.7
1987	8.1	4.2	9.1
1988	8.8	3.4	10.0
1989	8.5	4.2	9.4
1990	8.3	3.0	9.4

Source: Republic of Ghana, Quarterly Digest of Statistics, Vol. XI, No.2, June 1993.

Table 16: Average Monthly Earnings Per Employee in Establishments (Cedis)

Establishment	All Sector				
	1985	1986	1987	1988	1989
All Establishments	3,633	7,433	10,524	13,805	24,257
Agriculture	2,753	5,740	7,955	10,594	19,608
Mining & Quarrying	10,471	11,920	17,017	11,523	17,177
Manufacture	5,059	8,787	15,216	21,411	36,793
Electricity/Gas/ Water	3,291	7,711	10,949	13,923	25,654
Construction	2,602	5,076	6,882	8,742	13,873
Trading/Hotels/ Restaurants	3,348	6,200	9,483	13,923	20,857
Transportation/ Storage/Communication	3,361	10,408	5,588	17,948	26,013
Finance/Insurance/ Real Estate/Business Services	4,548	8,422	13,877	19,374	43,068
Community/Social/ Personal Services	2,843	6,750	8,500	11,998	21,908

Source: Republic of Ghana: Quarterly Digest of Statistics, Vol. XI, No.2, Statistical Services, Accra.

Table 17: Average Monthly Earnings of Employees in Agricultural Establishments As Percentage the Average Earnings in All Establishments, 1973-92

Year	%	Year	%
1973	69.5	1983	78.0
1974	62.9	1984	100.5
1975	65.6	1985	75.8
1976	62.7	1986	77.2
1977	72.0	1987	75.6
1978	76.0	1988	76.7
1979	65.0	1989	80.8
1980	71.4	1990	na
1981	84.4	1991	na
1982	92.8	1992	na

Source: Rep of Ghana, Quarterly Digest of Statistics, Statistical Service, Accra (several issues)
na = not available

8. Conclusions and Recommendations

The agricultural sector is recognized as the sector on which the growth of the economy in the short and medium term would largely depend. However, its contributions to major economic variables have continued to decline under the ERP and SAP. While the negative trends in some of the variables can be considered as natural phenomenon, in some of the other variables such as foreign exchange earnings, contribution to GDP, etc., the decline was not envisaged.

The agricultural sector response to the ERP and SAP in terms of growth rate was quite high in the first five years (1983-88), about 5% per annum. It declined considerably in the last five years (1989-93), growing at an average annual rate of about 2.6%, below the population growth rate estimated at between 2.7 and 3.2% per annum. The agricultural growth rate lagged behind those of industry and services sectors. It is envisaged that for the economy as a whole to develop at an accelerated pace and also to avoid deficit in locally-produced food and importing large quantities of food, agriculture should grow at a minimum average rate of about 4% per annum up to the year 2000. To achieve the desired growth rate, some of the sectoral and economy-wide policies and reforms initiated under the ERP and SAP need to be reviewed.

The elimination of protection of domestic production of agricultural commodities due to the trade liberalization policy has proved disastrous for several agricultural industries, particularly, rice, oil palm, cotton (textiles), poultry and cattle among others. These have not been able to compete fovourably with low quality and cheap imports some of which are being dumped on the country or subsidized by the exporting countries. However, there has been increased production in a few crops such as pineapples, vegetables, particularly, chilies, cashew, etc.. These are being traded in increasing but still low quantities in external markets.

Cocoa, the principal agricultural export commodity of the country is still subjected to export duties which account for the declining real producer price. The policy of paying about 50-55% of the world market price to producers has not achieved a positive impact since cocoa production has been declining since 1990. In view of the low world market price for cocoa and a high rate of domestic inflation, a higher proportion of the world market price would have to be paid to producers in order to increase and sustain the real price. This implies that apart from reducing the operation cost of the Ghana Cocoa Board, the export tax should also be reduced.

The introduction of competition in the internal purchase of cocoa as a strategy to increase the producer price would not be effective in the short to medium term due to the few buyers who have been licensed over a period of about one year. In the short to medium term, therefore, the government pricing policy should not be contingent on what private buyers would do through competition but the price set by government should be such that increases in the nominal price which by itself has not been effective would result in increases in real prices.

The removal of subsidies on inputs has already showed a substantial negative effect on demand. The assumption that output prices would increase to offset the increased input prices has not been achieved, resulting in cost-price squeeze. The ratio of output and input prices has decreased substantially, making the use of purchased inputs unattractive, particularly, to the predominantly traditional small scale farmers. What has compounded the problem has been the increase in interest rates and a reduced proportion of agricultural loans to enable farmers pay for the increased input prices. The negative effect on the development of agriculture, in the short to medium term, cannot be over-emphasized. There is a need to ensure that the predominantly small scale and poor farmers have adequate access to bank loans and at reasonable interest rates to enable them pay for the increased input prices. This is very important given the fact that the use of improved

technologies are not widespread in the Ghanaian agriculture which is still described as traditional.

The privatization of input supply and distribution was aimed at enhancing availability at the farm gate and, in spite of the removal of subsidies, sold at reasonable prices due to expected competition and also improved efficiency in handling. The slowness of the private sector to take over the supply and distribution of inputs from the public institutions has reduced the availability of inputs in several farming communities. It appears necessary for the government to re-enter the trade until such time that the private sector has shown considerable interest and active participation.

The productivity of land and labour has not increased at all since the ERP and SAP were put in place. The increased production of some crops such as tobacco, cotton, rice, vegetables and tree crops which are expected to come from land expansion implies that productivity in the production of these crops would remain low. This makes the desirable growth rate of the sector under the medium-term agricultural development programme quite uncertain. Agricultural research should therefore be given top priority to produce the desired improved technologies as soon as practicable.

The incentives for agricultural production have been drastically reduced under the ERP and SAP; input subsidies have been abolished as well as guaranteed minimum prices for some selected commodities. Agricultural interest rates are now higher than those charged elsewhere, an obligation that commercial and secondary banks allocate a given proportion of loanable funds to agriculture has been abandoned; protection of production has been eliminated or the level drastically reduced. In the midst of all these, the small scale farmers who use mainly traditional methods and inputs for production are expected to compete with imports from cheap and also subsidized sources. It will definitely take some time for the agricultural sector to adjust fully to the changes occurring within the sector and the economy in general. Until such time, the incomes of the farm households would remain low and most likely decrease, leaving them very poor.

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APPENDIX

Selected Economic Indicators, 1970 - 1993

1970 - 1982

Indicator	1970	1971	1972	1973	1974	1975	1976	1977	1978	1989	1980	1981	1982
GDP Growth Rate (%)								2.3	8.5	-3.9	0.7	-2.8	
Per Capita GNP (%)					4	-14.7	-6.2	0.8	0.6	-2.2	-2.9	-6.5	-10.1
Per Capita GDP (%)													
Govt.Budget Surplus on Current Account (/Million)			9.4	-10.6	-28.9	-63.5	-163.8						
Balance of Payments (US$M)													
End of Year Exchange Rate (Cedi/US$1.00)													
Official	1.02	1.03	1.32	1.16	1.15	1.15	1.15	1.15	1.51	2.75	1.75	2.75	2.75
Parallel	1.64	1.75	1.64	1.49	1.73	1.99	2.92	9.20	8.96	15.56	15.87	26.25	61.67
Inflation Rate (%)	3	8	11	17	19	30	54	117	73	55	50	117	22
Domestic Savings Index													
External Debt													
% of GDP													
US$ Million													

1970 - 1982 (contd.)

Indicator	1970	1971	1972	1973	1974	1975	1976	1977	1978	1989	1980	1981	1982
Money in Circulation (% Change)	0.0	5.3	50.5	19.1	26.7	37.9	37.2	59.7	67.6	15.7	34.4	51.9	25.3
CPI (1977=100)													
Combined	13.6	14.9	16.4	19.3	22.8	29.6	46.2	100.0	173	267	401	869	1062
Food	10.5	11.8	13.0	15.7	18.2	23.8	39.9	100.0	159	258	393	829	1125
Food Production Index(1979 - 81=100)													
Total	na	95.2	92.1	96.0	121.4	111.5	100.9	94.1	93.3	99.7	99.5	101.5	98.3
Per Capita	na	107.3	100.9	102.0	146.9	131.4	115.1	103.9	99.6	103.0	99.7	98.7	92.2
Cocoa Price													
London /mt		232	270	585	987	723	1395	2935	2006	1727	1270	1127	1033
% Change			16.4	116.7	68.7	-26.7	92.9	110.4	-31.7	-13.9	-30.1	-11.3	-8.3
GDP by Sector(%) (1975=100)													
Agriculture		44.1	46.6	49.0	51.1	47.7	50.6				53.4		
Industry		18.2	17.7	18.6	18.1	20.9	19.2				16.2	15.2	12.6
Services		37.7	35.7	32.4	30.8	31.4	30.2				30.4		
Sectoral Growth Rates (%)													
Agriculture													
Industry												-0.39	-22.89
Services													

1983 - 1993

Indicator	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
GDP Growth Rate(%)	-4.6	8.6	5.1	5.2	4.8	5.6	5.1	3.3	5.3	3.9	
Per Capita GNP (%)	-7.2	7.7	1.5	2.5	1.2	3.4	3.1	-0.5	2.6		
Per Capita GDP (%)	-7.2	7.7	1.5	2.1	1.6	2.9	2.4	0.9			
Govt. Budget Surplus on Current Account ¢ Million	2.7	-1.8	-2.2	0.1	0.5	0.4	0.7	0.2	1.5		
Balance of Payments (US$M)		-36	14	-107	-112	-203	-308	-321	-470		
End Year Exchange Rate (Cedi/US$1.00)											
Official	30	60	60	120	163	328	335	345	390	520	805
Parallel	77	135	160	180	250	330	353	355	407	535	820
Inflation Rate (%)	129	40	10	25	40	31	25	36	10	13	25
Domestic Savings Index											
External Debt											
% of GDP			65	52	69	60	67	78	77	75	
US $Million											

1983 - 1993 (contd.)

Indicator	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Money in Circulation (% Change)			65	51	50	43	32	15	12	99	
					4225	4110					
CPI (1977=100)											
Combined	2367	3304	3672	4543	6352	8344	10449	14342	16927	18630	
Food	2755	3059	2718	3269	4527	6071	7594	10642	11599	12800	
Food Production Index(1979-81=100)											
Total	89.4	126.0	125.1	132.6	138.6	151.2	151.1	133.1	168.0		
Per Capita	80.7	109.5	104.9	107.5	108.9	115.2	111.7	95.3	116.4		
Cocoa Price											
London /mt	1,502	2,071	2,113	1,567	1,320	1,146	911	813	723	684	
% Change	45.4	37.9	2.0	-15.8	-15.8	-13.2	-20.5	-10.8	-11.1	-5.5	
GDP by Sector (%) 1975=100											
Agricullture	-	53.4	51.6	50.7	48.4	47.4	47.1	44.6	44.4	42.4	
Industry	11.3	11.6	13.0	13.3	14.1	14.4	14.0	14.5	14.3	14.5	14.6
Service	35.0	35.4	36.0	37.5	38.2	38.9	40.9	41.3	43.1		
Sector Growth Rate (%)											
Agriculture				0.0	3.6	4.2	-2.0	4.8		2.5	
Industry	-14.2	-11.9	17.8	-7.6	11.5	7.3	2.6	6.9	3.2		5.8
Service						7.8	6.7	7.9	5.7		