

AFRICAN DEVELOPMENT BANK GROUP



**GHANA – AGRICULTURAL SECTOR REHABILITATION
PROGRAMME**

Program Performance Evaluation Report (PPER)

**OPERATIONS EVALUATION DEPARTMENT
(OPEV)**

06 November 2002

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ACRONYMS AND ABBREVIATIONS

AAGDS	Accelerated Agricultural Growth and Development Strategy
ADB	African Development Bank
ADF	African Development Fund
ASRP	Agricultural Sector Rehabilitation Programme
BOG	Bank of Ghana
CDF	Comprehensive Development Framework
CSP	Country Strategy Paper
ERP	Economic Recovery Programme
FASDEP	Food and Agricultural Sector Development Programme
GDP	Gross Domestic Product
GIDA	Ghana Irrigation Development Authority
GOG	Government of Ghana
GLSS	Ghana Living Standards Survey
GPRS	Ghana Poverty Reduction Strategy
IDA	International Development Assistance
KFW	Kreditanstalt für Wiederaufbau
MDAs	Ministries Departments and Agencies
MOFA	Ministry of Food and Agriculture
MTADP	Medium Term Agricultural Development Programme
PCR	Project Completion Report
PCU	Project Coordinating Unit
PIU	Project Implementation Unit
PPER	Program Performance Evaluation Report
PRSP	Poverty Reduction Strategy Paper
SOES	State Owned Enterprises
SRL	Sector Rehabilitation Loan
UNDP	United Nations Development Programme

CURRENCY EQUIVALENTS

Currency Unit	:	Cedi
UA 1	:	9201.70 Cedis (May 2002)
UA 1	:	1.2431 US\$ (May 2002)

FISCAL YEAR

1 January -31 December

SUMMARY RATINGS

Evaluation Criteria	PPER
Relevance	Satisfactory
Achievement of Objectives	Satisfactory
Efficiency	Satisfactory
Institutional Development	Satisfactory
Sustainability	Satisfactory
Aggregate Performance	Satisfactory
Borrower Performance	Unsatisfactory
Bank Performance	Unsatisfactory

PREFACE

1. This is a Programme Performance Evaluation Report (PPER) of the Agriculture Sector Rehabilitation Programme (ASRP) of Ghana. The ASRP was initiated by GOG to complement the stabilization and liberalization policies of the Economy Recovery Program (ERP) that was underway during 1983-89.
2. The goal of ASRP was to enhance the Ministry of Food and Agriculture's (MOFA's) capacity to provide effective policy and institutional support for rehabilitation and recovery of agricultural growth, and thereby contribute to overall economic growth and improvement in living conditions.
3. The specific objectives of ASRP were to: (i) provide foreign exchange to finance imported inputs; (ii) build technical and managerial capacity within MOFA; (iii) streamline and rationalize agricultural research and extension; (iv) pilot-test low-cost, farmers-managed small-scale irrigation schemes; and (vi) privatise input markets.
4. The African Development Fund (ADF) and other major lenders co-financed ASRP with the largest contribution coming from the Bank Group (44.6%). The ADF loan was committed exclusively for quick disbursing for financing the foreign costs of agricultural inputs, especially fertilizers.
5. While this PPER assesses the extent to which the development objectives of ASRP are met, the report focuses mainly on the implementation performance of the ADF component. Information gathered from the appraisal report, the PCR, academic literature, discussion with officials and academics in Ghana is utilized in preparation of this PPER. The organization of the PPER follows OPEV's revised guidelines that are contained in document ADB/ADF/OPEV/2001/01.

BASIC PROGRAMME DATA

Country	Ghana
Programme	Agricultural Sector Rehabilitation Programme
Loan Number	F/GH/AGR/87/7
Borrower	Government of Ghana
Guarantor	None
Beneficiary	Ministry of Food and Agriculture
Executing Agency	Bank of Ghana

Loan Data	Appraisal Estimate	Actual
Total Project Cost (UA million)	41.74	N/A
Loan amount (UA million)	18.61	18.61
Loan approval date	June 1987	26 June 1987
Loan signature date	N/A	16 September 1987
Loan effectiveness date	September	17 December 1987
Effective date first disbursement	N/A	19 December 1988
Effective date of last disbursement	December 1989	18 March 1993

Financing Plan (UA million)	Appraisal Estimate	Actual
ADF	18.61	18.61
GOG	01.05	01.05
Co-financiers: World Bank	13.90	13.90
KFW	06.95	06.95
UNDP	1.23	1.23

Implementation Performance Indicators

Cost overrun/underrun	0%
Time overrun	
Slippage on completion date	200%
Slippage on last disbursement	200%
Number of extensions of last disbursement date	2
Project implementation status	completed

Missions

Type	No. of persons	Date	Person-weeks
Appraisal	2	March 1997	6
Supervision	2	April 1988	2
	3	December 1989	6
	1	June 1991	2
	2	September 1992	4
PCR	2	March 1995	4

Disbursement (UA Million)

	At appraisal	Actual
Total disbursement	18.61	18.61
Amount cancelled	-----	-----
Unused balance	-----	-----

Other Projects Financed by the Bank Group as of January 2000

Sector	No. of operations	Cumulative loans, grants, equity participation in UA million	Cumulative disbursement in UA million	Disbursement as % of approvals
Agriculture	20	209	158.87	76
Social	9	69.8	33.0	47
Transport	8	53.49	30.11	56
Industry	7	136.27	93.10	68
Public utilities	8	76.23	65.24	86
Miscellaneous	3	34.02	28.06	82

EVALUATION SUMMARY

Programme Origin and Rationale

1. Ghana experienced severe socioeconomic crises in the late 1970s and early 1980s, as evident from worsening key economic trends. Real GDP per capita substantially declined. Food self-sufficiency index dropped to a record low. The country's ability to finance growth was restricted by low domestic savings, poor performance of export commodities, and decline in capital inflows. Financing huge budget deficits through borrowing from domestic banking system contributed to rapid growth in money supply and high rate of inflation.

2. In response to deteriorating macroeconomic imbalances (fiscal, monetary and trade) and worsening living conditions, the Government of Ghana launched an Economic Recovery Programme (ERP) in 1983. Following the success of GOG in stabilizing the macroeconomic environment and boosting economic growth in its first phase of implementation (1983-86), it embarked on sector-specific reforms. The Agriculture Sector Rehabilitation Programme (ASRP) was initiated by GOG to complement the stabilization and liberalization policies, and rehabilitate the key growth "movers" of agriculture.

Program Objectives and Relevance

3. The broad objective of ASRP was to enhance MOFA's capacity to provide effective policy and institutional support for rehabilitation and recovery of agriculture production and productivity, and thereby contribute to overall economic growth, food intake of the population, and reduce poverty.

4. The specific objectives of ASRP were to: (i) provide foreign exchange to finance imported inputs; (ii) build technical and managerial capacity within MOFA; (iii) streamline and rationalize agricultural research and extension; (iv) pilot-test low-cost, farmers-managed small-scale irrigation schemes; and (vi) privatize input markets (fertilizers, tractor hire services and veterinary drugs).

5. These stated objectives of the ASRP and its components are consistent with Government of Ghana policy objectives and priorities, as detailed in the ADB appraisal document. The ASRP is also consistent with the overarching development objectives of ADB and its lending priorities for Ghana.

Costs and Financing

6. The estimated total cost of ASRP at appraisal was UA 41.74 million, of which 91.8% were in foreign exchanges. The foreign exchange costs were co-financed by ADF (UA 18.61 million), IDA/World Bank (UA 13.90 million), Kreditanstalt fur Wiederaufbau (UA 6.95 million), and the United Nations Development Programme (UA 1.23 million). The GOG and IDA provided the local currency component. By the end of the completion of ASRP, the estimated costs were fully disbursed.

Achievement of Objectives and Outcome

7. ***Consistency with Development Objectives:*** Growth in agriculture reversed its downward trend of the 1970s and early 1980s; in the years during and after the ERP and ASRP. The agriculture sector grew on average at annual rate of 2.8% in 1984-90, 2.7% in the early 1990s, and 4.4% in the second half of the 1990s. The years of recovery and growth in agriculture correspond with improved

performance in the overall economy. The overall economy, as measured by real GDP grew at annual rate of 5.7 percent in 1983-89 and 4.4 percent in the 1990s. These years of economic recovery and growth are also marked by decline in incidence of poverty. Whilst there is an apparent correlation between these trends and the ASRP's objectives of agricultural growth and poverty reduction, it is, however, hard to isolate and ascribe these developmental effects to ASRP.

8. ***Agricultural Policy Development:*** Significant agricultural policy reforms have also occurred during and after ASRP. During 1983-89, the reform program focused on stabilization of the macroeconomic environment followed by liberalization of agricultural prices and markets. In the 1990s, the policy thrusts were on developing and implementing agricultural policies and programs, and building institutions including markets. With the decentralization of MOFA, which started in 1987, the role of MOFA at national level is shifting towards formulation, implementation and monitoring of policies, provision of technical assistance to the districts, provision of legal and regulatory services, and evaluating impacts of policies. Under the GPRS framework, its mandate is expanded to coordinate the activities of a broader agenda involving several Ministries.

9. ***Improving Delivery of Agricultural Services:*** Following the policies and activities initiated in ASRP and their pursuit afterwards, there have been improvements in functioning of national agricultural research and extension system. A national agricultural research master plan is in place and guides formulation of priority agricultural research programs. A competitive agricultural grant scheme has been established and running. New methods of extension systems have been in place. A unified agricultural extension system covering crop, fishery and livestock sub-sectors is in place. There are research-extension liaison committees representing different agro-ecological zones. Policies of staff training and retention, improving partnership with the private sector, and strengthening broad-based farmer participation are at the center of the current reform agenda.

10. ***Liberalization of agricultural markets and private sector development:*** By the end of 1991 the whole fertilizer channels were privatized, most of agricultural prices were decontrolled, and subsidies on inputs were phased out. With opening up agricultural markets to private trading, the numbers of marketing channels and density of independent private operators have increased, particularly on the downstream of marketing channels.

Institutional development impact

11. The above outcomes show that the ASRP has had considerable impact on improving formulation of policies and programs, enhancing delivery of agricultural support services, and building rural institutions involving major stakeholders (i.e., farmers, traders, and processors) in influencing policy formation and implementation.

Sustainability

12. The ASRP has laid the foundations for improved and sustainable agricultural growth: (i) improving agricultural policies; (ii) strengthening delivery of agricultural services in research and extension; (iii) developing institutions including markets and user-based associations; and (iv) investing in basic infrastructure such as roads and irrigation. Continuous public support is necessary in these areas for getting the agriculture sector grow at higher sustainable growth path.

13. However, there are still key sustainability issues that need to be addressed to accelerate agricultural growth at low economic and environmental costs. First, continuous stabilization of the macroeconomic environment at high levels of aggregates is crucial. Second, the current level of financing of agricultural capital expenditures through non-domestic loans and grants is not sustainable. Third, source of agricultural growth has to shift from costly land expansion to technology-led growth. Fourth, state withdrawal from provision of agricultural marketing and financial services needs to be replaced by more efficient low-cost and competitive markets. Finally, the current drive towards diversification is strategic, but the country has to continuously identify its comparative advantage in both domestic and international markets.

Borrower Performance

14. The performance of the Government, particularly MOFA, was unsatisfactory with respect to the design and implementation of the ADF component of the ASRP. There were problems of compliance at the start up of the project. MOFA's performance was inadequate as demonstrated in its assignment of staff without adequate training in project management, poor monitoring of the performance of the project, and non-compliance with key reporting requirements. The switching of the implementation arrangement from BOG to PCU was not consistent with the market reform process. There was no monitoring mechanism built into the ADF component and the project was not monitored to the satisfaction of the Bank Group. Progress reports and auditing, as required by the Bank, were not implemented. Communication between the Bank Group and government agencies was weak. The PPER mission was unable to access project-specific documents because of staff turnover and poor institutional memory.

Bank Group Performance

15. The ADF commitment to ASRP was in response to GOG expressed need, and it was consistent with the Bank's country strategy for Ghana. However, the performance of the Bank with respect to the preparation, appraisal and implementation of the ADF component is rated unsatisfactory. The Bank group was not pro-active in policy changes affecting the agriculture sector. The appraisal report did not show a clear understanding of key constraints holding agricultural growth, and was deficient with respect to technical, financial and economic analyses. Quick loan disbursements were planned without having in place an implementing institutional mechanism in operation. Switching from BOG to PCU in MOFA was contrary to the policies of stabilization and liberalization.

16. There was no logical framework with indicators to monitor performance of the ADF component. Thus, it was not adequately monitored. Supervision was weak, and the requirements stated in the appraisal were not enforced. Except for the final project completion report, no progress reports were submitted to ADB. No audit reports also exist. Although ASRP was co-financed and the Bank group was the major co-financier, the ADF component was often not recognized in project completion reports of the other financiers.

Conclusion

17. The overall performance of the ASRP is judged **satisfactory**, particularly when it is evaluated in its totality with special emphasis on improving capacity for formulation of agricultural policies and programs, strengthening delivery of agricultural services, developing farmer-based associations, and supporting market development. These key components, which are consistent with the country's development objectives, have contributed towards creating institutional, policy and technological bases for private-led agricultural transformation. Whilst the ADF funding has been the weakest component [please refer to sections 3.1 to 3.3, 4.1, and 4.7 to 4.9], the lessons learned will have important bearings for improving effectiveness of future development interventions for the Bank.

Lessons Learned

18. The ADF component within the ASRP framework presents lessons relevant to policy loans targeted for quick disbursements.

- ◆ For satisfactory compliance of terms of loans, it is necessary that terms are clear and agreed, and project governance is strictly adhered to and enforced.
- ◆ A project/program's scope is generally related to capacity to implement and monitor. Switching location of implementation, and inadequacies in technical and managerial capacity of project implementing agencies considerably delayed completion of ADF quick disbursement funds.
- ◆ The switching of the management of ADF funds from Bank of Ghana to MOFA was not consistent with policies of market and price liberalization. Later in 1991, the execution of the ADF loan was re-located within the BOG, but three years after the loan became effective.
- ◆ Improved communication, adequate supervision, and flexible but correct timely response to problems are necessary to ensure implementation of a project on track. Where these elements are weak, as in the case of the ADF component, responses are either delayed or incorrectly applied.
- ◆ Since quick disbursing loan is by definition short-term and strictly time-bound, it becomes less relevant and effective as implementation is prolonged. The urgency of importing fertilizers in 1988-89 was not relevant in 1992 and 1993 since lack of demand, but not supply, was the factor limiting fertilizer use in early 1990s. The delay in implementation rendered ADF less relevant to the stabilization and liberalization process within the country.
- ◆ Whilst tracing uses of funds disbursed through auction market is desirable, validating such uses is problematic since such funds are fungible. A better and cost-effective policy is to include requirements such as policy-reform and creation of local-currency account as conditions for disbursement of funds. These types of requirements were either missing or not implemented in the ADF component.
- ◆ In a development programme involving different co-financiers and components, it is cost-effective to coordinate design and implementation, and harmonize choice of instruments. The outcomes of ASRP could have been larger if the components that complement were carefully integrated.

- ◆ Continuous consultations with borrowing country, donors, and project staff are also necessary to ensure project objectives, timing of implementation, and operation are not in conflict with complementary policy reform. The channelling of inputs through government-controlled channels at time of market liberalization is a manifestation of poor consultations and coordination.

Recommendations

For the Borrower

19. From the experiences of the design and implementation of ADF project within ASRP, there were problems related to compliance with terms of loan and to project administration. These problems have persisted as evidenced from the year 2000 annual portfolio review report: weakness in project implementation and monitoring, non-familiarity with the Bank's rules and procedures, and delays in counterpart funds. Much greater effort is necessary to improve GOG participation in designing programs and projects, building effective monitoring and evaluation system, drawing lessons and improving performance, and coordinating donors effectively in support agriculture.

For the Bank Group

20. The ADB has taken significant actions to improve effectiveness of project performance since the mid-1990s: enhance ownership of projects through stakeholders participation; improve project identification based on CSP, PRSP and sector-specific reviews; increase frequency and quality of supervision and reporting; and increased technical assistance to enhance quality-at-entry. However, these actions have not yet improved quality of projects in Ghana, as evidenced from recent country portfolio review reports. This PPER recommends ADB to step up its efforts, with emphasis on informed project identification, provision of adequate time and resources for the Bank's staff, reevaluation of the incentive system within the Bank with greater emphasis on quality instead of quantity of projects, strengthening portfolio management approach, establishing effective M&E and response system, and increased participation of the Bank Group in policy dialogue with GOG and donors.

1. PROGRAMME BACKGROUND

1.1 Country and Sector Economic Context

1.1.1 Except for the early part of the 1970s, the economic performance of Ghana deteriorated severely in the late 1970s and early 1980s, as evident from worsening key economic trends. Real GDP per capita substantially declined, mainly due to the poor performance of the agriculture sector, which declined at annual rate of 0.3 percent in the 1970s and fell precipitously in the drought years of 1982 (6.7%) and 1983 (1.5%). Food self-sufficiency index dropped to a record low of 60 percent, aggravated by the droughts of the early 1980s. The major export commodities experienced a significant decline in production; severely limiting the country's import capacity. The country's ability to finance overall growth was hampered by low and declining domestic savings, export earning, and capital inflows. Financing huge budget deficits through borrowing from domestic banking system contributed to rapid growth in money supply and high rate of inflation. In 1983, annual rate of inflation reached its height of 122.8 percent.

1.1.2 In response to deteriorating macroeconomic imbalances (fiscal, monetary and trade) and worsening living conditions, the Government of Ghana (GOG) launched an Economic Recovery Programme (ERP) in 1983 in two phases: (i) correct macroeconomic imbalances and influence macro prices (i.e., interest rate, exchange rate, and inflation) in 1984-86; and (ii) and redress structural weakness in major sectors of the economy, agriculture in particular (1987-89). The major macroeconomic policy reforms included restraining and rationalizing public expenditures and improving public revenues, easing restrictions on capital movements and trade barriers, liberalizing foreign exchange market, and tightening monetary policy.

1.1.3 Following the success of GOG in stabilizing the macroeconomic environment and boosting economic growth in its first phase of implementation (1983-86), it embarked on the second phase with emphasis on market-based, agriculture-led economic growth. Within the agriculture sector, the GOG instituted agricultural policy reforms aimed at self-sufficiency in food and industrial crops, improvement in fishery and livestock production, and agricultural diversification. The main policy instruments included decontrol of most of output and input prices, removal of input subsidies, liberalization of output and input markets, rehabilitation of physical infrastructure, strengthening of operational capacity of MOFA, improvement in delivery of agricultural support services, and promotion of participation of private sector as main vehicle for agriculture transformation.

1.1.4 The Agriculture Sector Rehabilitation Program (ASRP) was initiated by GOG to complement the stabilization and liberalization policies by rehabilitating the key growth "movers" of agriculture on the supply side: strengthen organizational and human capacity and services in MOFA, support agricultural policy reforms, enhance delivery of agricultural support services, pilot-test low-cost, farmers-managed small-scale irrigation schemes, and provide foreign exchange support to finance agricultural inputs

1.1.5 The Bank Group (ADB and ADF) and other major lenders co-financed ASRP with the largest contributions coming from the Bank group (44.6%) and IDA/World Bank (33.3%) loans. The Bank Group funding of ASRP is consistent with its past and present support for development of the agriculture sector in Ghana. As of year 2002, the Bank Group has committed a total of UA 619.03 million net of cancellations, with 47.5 percent allocated to agriculture. The project lending in ADF VIII programming cycle (1999-2001) targets agriculture, transport and social services in particular.

1.2 Programme Formulation

1.2.1 Upon the request of the Government of Ghana, ASRP was approved by a group of multilateral lending institutions and donors in a consultative meeting in Geneva in 1986. The group agreed to finance different components of the ASRP with the ADF loan committed for quick disbursing for financing the foreign costs of agricultural inputs, especially fertilizers.

1.2.2 Following the Geneva meeting, the Bank Group visited Ghana in March 1987 to appraise the ADF component. Loan negotiations as well as the Board approval were completed in June 1987. The loan agreement was signed in September 1987. The Bank of Ghana (BOG) was designated as the executing agency in light of its previous experience in managing a similar non-project Sector Rehabilitation Loan (SRL) in 1984. The loan was declared effective in December 1987 to be fully implemented over a two-year period (1988-89).

1.3 Objectives and Scope at Appraisal

1.3.1 The primary objective of ASRP was to enhance MOFA's capacity to provide effective policy and institutional support for rehabilitation and recovery of agriculture production and productivity, and thereby contribute to overall economic growth, food intake of the population, and reduce poverty.

1.3.2 The specific objectives of ASRP thus included: (i) providing foreign exchange to finance imported inputs; (ii) capacity building in MOFA; (iii) streamlining and rationalizing agricultural research; (iv) experimenting with new extension methods and institutional arrangements for delivery of extension services; (v) promoting design of low-cost, small-scale irrigation projects; and (vi) privatisation of input markets (fertilizers, tractor hire services and veterinary drugs) and state-owned agricultural enterprises (SOEs).

1.3.3 The main components of the ASRP were to: (i) enhance and strengthen MOFA's capacity to formulate, implement and monitor policies, programmes and projects; (ii) improve delivery of agriculture support services in research and extension; (iii) promote small-scale farmers-managed irrigation schemes; and (iv) support private sector development. The ADF component of financing purchases of agricultural inputs was a temporary balance of payment support to jump start agricultural production.

1.3.4 The sets of actions/targets for attaining these outcomes comprised of formulating new policies (for example, agricultural research policy, agricultural extension policy, etc.), new legislation and laws, supporting special studies and pilot-testing, training of technical and managerial staff, provision of operational support such as vehicles and computers, and developing research and information systems.

1.4 Financing Arrangement

1.4.1 The estimated total cost of ASRP at appraisal was UA 41.74 million, of which 91.8% were in foreign exchanges. The foreign exchange costs were co-financed by ADF (UA 18.61 million), IDA/World Bank (UA 13.90 million), Kreditanstalt fur Wiederaufbau (UA 6.95 million), and the United Nations Development Programme (UA 1.23 million). The GOG and IDA financed the balance 8.2% to cover local currency component.

2. EVALUATION

2.1. Evaluation Methodology and Approach

2.1.1 Evaluating all the components of the ASRP are outside the scope of this PPER since the different co-financiers executed their own-funded components independently. On the other hand, trying to isolate and focus on the ADF component is not meaningful and practical. Even if it is deemed necessary, the ADF funds were largely channelled through auction market and it is hard to trace their actual uses since these funds are fungible. Therefore, a mixed strategy is followed in this report.

2.1.2 The first strategy is to treat the whole ASRP as a composite unit for evaluating relevance of goals and objectives (4.1), achievement of development objectives and outputs (4.2), efficiency (4.3), institutional development impact (4.4), sustainability (4.5) and aggregate performance rating (4.6). Two complementary evaluation methods are followed here. The first method is to examine trends in economic growth and incidence of poverty. The purpose is to show if the GOG development objectives are met since the institution of ASRP and find correlation between growth performance and poverty reduction. The second is a qualitative counter-factual analysis based on views and judgements of relevant government officials, academics, and staff members from the Bank Group. These methods are combined to establish a quick but meaningful assessment of the performance of the ASRP. *To the extent these methods converge and point to a similar direction of change in outcomes, the ASRP is judged to have positive effect without quantifying its magnitude.*

2.1.3 The second strategy is to focus on ADF component only when evaluating the borrower performance (4.7), the Bank Group performance (4.8), and factors affecting implementation and performance (4.9). Information gathered from the appraisal report, the PCR, academic literature, discussion with officials and academics, and the retrospective logical framework is utilized. The PPER mission was unable to obtain project-related documents at MOFA and BOG because of poor documentation.

2.2. Performance Indicators

2.2.1 Trends in overall economic growth as well as agricultural growth, and changes in poverty incidence are traced to establish temporal changes in ASRP primary objectives --agricultural growth and improvement in living conditions.

2.2.2 For the different components of ASRP and associated outcomes, there will be assessment of changes in agricultural policies, agricultural research and technology generation, delivery of agricultural extension, and private sector development.

2.2.3 For ADF component, the achievements in terms of financing specific agricultural inputs are shown in the retrospective logical framework with a qualification that the PPER was not able to access project-specific documents and confirm these figures.

3. IMPLEMENTATION PERFORMANCE

3.1. Loan Effectiveness, Start-up and Implementation

3.1.1 Although the ADF loan was pronounced effective in December 1987, the declaration was premature. For example, the ADF requirement of hiring an independent agency responsible for procurement of goods was not fully agreed. The problem was not fully resolved to the satisfaction of all parties. Because of incomplete compliance, the first loan disbursement came into effect a year later.

3.1.2 The original agreement was for BOG to execute the ADF component. But it was later transferred to the Project Coordinating Unit (PCU) in MOFA in 1988. PCU, which was established in 1987, was not, however, fully operational and familiar with the Bank's procurement procedures and rules. The implementation of the project was transferred back to BOG in 1991, as MOFA was withdrawing from distribution of inputs in response to privatization of input markets. The switching between MOFA and BOG caused not only delays, but also problems of reporting and accountability.

3.1.3 These modifications in loan terms compromised the program quality-at-entry. And, as the implementation of the ADF component was prolonged, it became less relevant. For example, the priority given to allocate most of the ADF funds to purchase fertilizers became less relevant in the early 1990s because of contraction of demand for fertilizer and donor-assisted fertilizer grant. As it turned out, there was overstocking of fertilizers in the early 1990s. In effect, the quick disbursing BOP support instrument came in collusion with the market liberalization process that was underway since the late 1980s.

3.2. Adherence to Programme Costs, Disbursement and Financial Management

3.2.1 The planned co-financing of ASRP was fully disbursed. ADF fully disbursed the committed amount of UA 18.61 million, which represented 44.6 percent of the total costs.

3.2.2 The ADF loan became effective in December 1987 and it was to be fully disbursed within two years – 1987/88 and 1989/89. But the full amount of the loan was fully disbursed by 1993. Only 24.3 percent of the ADF loan was disbursed prior to 1991. The balance was disbursed in 1992 and 1993. The reasons for the delays were failure to comply with the loan conditions, weakness in project management capacity of PCU in MOFA, and the change in mode of input distribution and associated adjustments from state-controlled channels to market-based allocation process.

3.2.3 The ADF loan was planned mainly for purchase of fertilizers, with a target allocation of 46%. But the actual allocation was 23%, less than half of the planned allocation. More of the ADF loan was used for purchases of tires and tubes, and fishery inputs, which increased from 7.5% and 20.5% at appraisal to 33.2% and 29.7% in actual disbursements, respectively. Such divergence was due to the changing demand conditions after the liberalization of fertilizer prices and markets, and removal of subsidies. Following the liberalization of fertilizer markets, effective fertilizer demand was below imports. In 1989, a total of 65, 239 tons was available, but sales amounted to 32, 657 tons, and in 1990 43,350 tons were available, but 30, 609 were sold.

3.3. Reporting, Monitoring and Evaluation Achievements

3.3.1 As the current Head of the PCU noted, the tasks of procurement and disbursement were given to PCU without sufficient familiarity with ADB procurement and disbursement procedures and rules. Since the Bank did not provide training in procurement and disbursement, for the PCU staff, the project was perceived as a short-term intervention with little incentive built in terms of training and logistic support. After the remaining ADF funds were transferred to the Bank of Ghana, the PCU in effect disengaged from the project with little follow up on the subsequent activities of the programme.

3.3.2 The ADF appraisal clearly states the reporting and auditing requirements for the implementing agencies -- BOG and the PCU within MOFA. Independent auditors acceptable to the Bank Group would be appointed and the auditors' report would be submitted to ADF not later than six months after the end of the financial year. Both the Bank of Ghana and the PCU would keep records and submit regularly quarterly reports and a final completion report to ADF.

3.3.3 However, these requirements were not met to the satisfaction of the Bank Group. No independent auditors were appointed. None of the implementing agencies reported their activities and performance, except the PCR from PCU in 1995. The PPER mission was unable to trace project-specific documents because of the departure of individuals from their official positions. Despite the fact that ADF was the major financier of ASRP, the implementation of ADF components was not accorded the same attention by MOFA as the components financed by other donors.

4. PROGRAMME PERFORMANCE EVALUATION AND RATINGS

4.1 Relevance of Goals and Objectives, and Quality at Entry

4.1.1 ASRP is rated **satisfactory** on the basis of relevance. The agriculture sector policy reforms that started in late 1980s recognized the leading role of agriculture for transforming the Ghanaian economy. The policy changes are intended to improve the policy, institutional and technology bases for market-led agricultural growth process. The objectives stated in ASRP and its components are consistent with GOG policy objectives and priorities.

4.1.2 The ASRP is also consistent with the overarching development objectives of the Bank Group and its lending priorities for Ghana, as spelled out in the country strategy papers and its share in the country portfolio. Supporting market-based and private sector led agricultural growth is central for the Bank Group poverty reduction strategy.

4.1.3 However, the quality-at-entry of the ADF component was unsatisfactory. In retrospect, there were some design problems that might have weakened the quality-at-entry and effectiveness of the ADF component. First, the preparation and appraisal of the ADF component was not based on thorough analysis of pre-existing conditions that limited agricultural performance, and identification of strategic entry points. Second, the appraisal was not based on adequate financial, economic, and institutional analyses. For example, the method of identification of the fixed list of inputs in the appraisal, and the assumptions and the risks were not explicitly elaborated. Third, the implementation capacity of the Ministries Departments and Agencies (MDAs) was not properly factored in determining the scope of ADF activities. Fourth, the focus was on lending with no essential complementary instruments combined such as training and operational support. Finally, there was no explicit methodology for programme design and evaluation matrix (MPDE) in the appraisal with both process and output indicators.

4.1.4 The most significant and positive adjustment was the channelling ADF funds through the auction markets, which was consistent with the liberalization of input markets. In effect, such mode of disbursement combined three key desirable elements – balance of payment support, relieving input constraints to agriculture, and supporting privatization process. Such procedure allowed demand, not administrative allocation, to determine use of agricultural inputs.

4.2. Achievement of Objectives and Output

4.2.1 **Agricultural Growth:** Growth in agriculture has reversed its downward trend of the 1970s and early 1980s; it grew on average at annual rate of 2.8% in 1984-90, 2.7% in the early 1990s, and 4.4 percent in the second half of the 1990s. With population growing annually between 2.7 and 2.9 percent, these growth rates are modest but a significant improvement from the pre-1983 substantial declines in per capita agricultural income.

4.2.2 Growth response to changes in macro-and sector-specific policies has been uneven within the agriculture sector. Supply response has been strong among the traditional export crops, controlling for the effect of weather. For example, the production of cocoa sub-sector grew at the rate of 5.7% and 6.8% in 1991-95 and 1996-00, respectively; which has been attributed to currency devaluation, increase in government-fixed producer prices, and abolition of export taxes. On the other hand, supply response of tradable but import-competing crops such as rice and cotton has improved but unable to compete with imports due to increased production and marketing costs, and low productivity. The supply responses have been the least among most of the food crops, which behave as non-tradable because of high marketing costs and poor market integration.

4.2.3 The significance of the better performance of the export crops is more in generating foreign exchange earnings and less in its contribution to the overall effect on agricultural growth because of its small share in agriculture GDP (no more than 20 percent of Agricultural GDP). In the early 1990s, for example, cocoa sub-sector registered 5.7% growth, but the agriculture sector grew at a rate of 2.2 percent. The overall growth performance of agriculture traces closely the growth rates in the slow-growing sub-sectors (food crops, forestry, fishery), particularly the non-cocoa crop sub-sector that accounts for at least 60 percent of the agricultural GDP.

4.2.4 **Contribution to Economic Growth:** With agriculture contributing close to 40 percent of the GDP, growth in the overall economy correlates positively with growth performance in agriculture sector; in the years of recovery, growth in agriculture corresponds with improved performance in the overall economy. The overall economy, as measured by real Gross Domestic Product (GDP), grew at annual rate of 5.7 percent in 1983-89 and 4.4 percent in the 1990s. However, performance measured in terms of annual growth rate of real per capita income has been modest; averaging, for example, 1.6 percent in early 1990s.

4.2.5 **Contribution to Poverty reduction:** The years of economic recovery and growth (the late 1980s and 1990s) are marked by decline in incidence of poverty. From 51.7 percent in 1991/92, for example, incidence of poverty declined to 39.5% in 1998/99. The decline in poverty is robust and it holds regardless of admissible poverty lines chosen. And the decline in poverty is driven mainly by distribution-neutral income growth and less by improvement in income inequality. However, as the findings from the recent Ghana Living Standards Survey (GLSS) show, there are localities experiencing growing inequality and hence less marked reduction in poverty.

4.2.6 Notwithstanding the aggregate decline in poverty incidence, it still remains high, particularly among some regions and socioeconomic groups. The Ghana Poverty Reduction Strategy (GPRS) recognizes these variations and proposes a comprehensive policy framework to reduce poverty with priorities accorded to good governance, improved macroeconomic management, agriculture-led economic growth, development of human capital, and targeted anti-poverty programmes. With most of the poor in rural areas, particularly in agriculture producing mostly food crops; the focus on broad-based agricultural growth is the right approach to integrate these groups in the growth process.

4.2.7 **Agricultural Policy Development:** Prior to 1983, the agriculture sector was conditioned by poor macroeconomic environment, extensive GOG price and market controls, weak agricultural support services in research, extension and finance, undeveloped infrastructure and markets, low levels of human capital, both basic and specialized skills. The period of economic recovery (1983-89), which included the ASRP, focused on stabilizing the macroeconomic environment, decontrolling most of agricultural input and output prices and trade, and withdrawal of the GOG from production and marketing activities. In addition to these policy changes, there were interventions in strengthening agricultural support services and building institutional capacity.

4.2.8 In order to consolidate these gains achieved in the 1980s and continue the reform process with a focus on developing the private sector in market-led agricultural growth process, MOFA formulated a comprehensive Medium Term Agricultural Development Programme (MTADP) in 1989 to guide policy priorities and resource allocation and invest in core growth “movers” (research extension, credit, infrastructure, human capital).

4.2.9 Because of the realization that growth in the overall economy as well as in the agriculture sector was not rapid and consistent, the GOG launched its Vision 2020 in 1995. MOFA formulated and adopted its Accelerated Agricultural Growth and Development Strategy (AAGDS) in support of Vision 2020 in year 2000. The major thrusts in AAGDS are similar to MTADP (policy reform, technological change, institution building, human capital development), but with greater push to accelerate agricultural growth within decentralized administration. Instead of following discrete project approach, as it was practiced within MTADP, the focus has now shifted to sector-wide approach, as elaborated in the current Food and Agriculture Sector Development Programme (FASDEP). FASDEP provides the strategic frame within which present and future projects and programmes operate.

4.2.10 These policy reforms are mostly formulated within the Policy, Planning, Monitoring, and Evaluation Directorate (PPMED) of MOFA, which came into existence during the time of ASRP. Whilst the PPMED has developed its policy formulation and monitoring capacity, it is still short in staff with analytical skills, which become critical as it is assuming expanded mandate within the current decentralized framework.

4.2.11 **Agricultural Research:** Prior to 1983, agricultural research was carried out by a number of institutions with little national research coordination, funding, infrastructure, and organic link with extension services. The ASRP set as its objective to reorient and rationalize agricultural research to generate relevant priority technologies to increase agricultural productivity growth.

4.2.12 The main components of the ASRP and subsequent policies comprised rehabilitation of research facilities including building information system, supportive development of research policy and framework for priority setting, creating coherent research system with improved research coordination and management, establishing research-extension-farmers committees, and training of research staff.

4.2.13 Most of these components have achieved their specific objectives. There is now a working national agricultural system with improved research management. A national agricultural research master plan is in place and guides formulation of priority agricultural research programmes. A competitive agricultural grant scheme has been established and running. Research infrastructure has been rehabilitated with improved information system in place. Staff training and retention continue to be a priority for making the research system functional.

4.2.14 However, there are still areas of improvements that need to be addressed to make the system cost-effective and sustainable: (i) improve allocation of public expenditure to research; (ii) enhance partnership with the private sector to participate in identifying and funding priority research; (iii) strengthen broad-based farmer participation; and (iv) provide incentive to retain highly-valued marketable skills.

4.2.15 ***Agriculture Extension System:*** The agricultural extension system has gone through phases of development. Based on assessment of past experiences and pilot testing, a modified T&V system is instituted. A unified agricultural extension system covering crop, fishery and livestock sub-sectors is in place. There are research-extension liaison extension committees representing different agro-ecological zones. Until 1999, there were regular training programs of special matter specialists, who provide technical backstopping to extension agents. The extension agents in turn promote awareness, train farmers, demonstrate application of new technologies, and participate in adaptive on-farm research, and monitor progress and performance.

4.2.16 There are indications that point to improvements both in process and output indicators. The extension-farmer ratio has improved within the modified T&V system. Adoption of new technology has increased among farmers growing high-value crops. Decomposition of growth sources by crop shows significant improvement in yields for crops like rice. A system of monitoring and evaluation of extension activities, and regular reporting have been also instituted in all regions.

4.2.17 Since the institution of decentralized administrative system in 1997, DAES is undergoing new reorientation and changes. Implementation of extension services is transferred to district assemblies. DAES at the national level focuses on setting and coordinating policies, providing technical support, and coordinating extension activities. According to the new agricultural extension policy, the emphasis is on building farmer-based organizations, expanding the content of extension services (i.e. awareness and prevention of HIV/AIDS, gender, etc), and promoting participation of the private sector in delivery of extension services.

4.2.18 However, there are questions on the speed, applicability and effectiveness of managing the reform process. The move to privatize extension services on cost sharing basis is not applicable to majority of small farmers who rarely use new or improved technologies. The evidence on effectiveness of the unification of extension system as well as research-extension liaison is mixed. While the unification of extension services obviates problems of fragmentation, its efficacy is in doubt, particularly as the subject matter of extension message expands. Finally, DAES is slow in adjusting its operations within the existing decentralized administrative framework, and building partnership with its partners in the private sector.

4.2.19 Small-scale irrigation: One of the key components of ASRP is to pilot-test and promote low-cost, farmer-managed, small-scale irrigation to reduce dependency on government-owned and operated large-scale irrigation schemes and on rainfed agriculture and associated production instability. The specific objective was to strengthen the technical capacity of Ghana Irrigation Development Authority

(GIDA) through twinning arrangement to test the economic viability of low-cost farmer-managed irrigation schemes, and expand these schemes based on lessons learned.

4.2.20 Although the accomplishments of GIDA were partial and slow, it managed to train its staff through on-the-job training while developing low-cost, small irrigation projects. In addition, some of the staff received overseas training. And, since the closure of ASRP, GIDA has been able to rehabilitate old irrigation projects for lease, develop small-scale irrigation schemes, guide and support formation of farmer-based water associations, and provide extension services. In the case of the small-scale irrigation schemes, the role of GIDA is limited to provision of infrastructure and technical support, and co-financing. Farmers are organized in irrigation associations and engaged collectively in co-financing, managing use of water, and maintaining the schemes..

4.2.21 Under the current decentralization framework, GIDA chiefly focuses on identification and development of irrigation projects, provision of technical services, and promoting farmer-based irrigation schemes. Only in the case of large-scale irrigation schemes, particularly dams and heavy pumps, GIDA owns and manages irrigation structures, and then leases out farmers.

4.2.22 ***Liberalization of agricultural markets and private sector development:*** By the end of 1991 the whole fertilizer channels were privatised, most of agricultural prices were decontrolled, and subsidies on inputs were phased out. With no legal restrictions for entry, opening up agricultural markets to private trading has created more marketing channels. Density of independent private operators has increased, particularly on the downstream of marketing channels. However, the evidence in fertilizer markets shows there are only a few importers and independent traders in the upstream channels. There are no more than four importers for the country, with one private importer controlling nearly half of the market share.

4.2.23 The thinness of these markets is not due to restrictions for entry, but due to instability in macroeconomic environment, high costs of capital, and low profit trading margin. Foreign exchange is scarce and costly because of rapid devaluation of local currency. Access is uncertain because of rationing practices. Acquiring loans through domestic banking system is prohibitive because of high interest rates and strict collateral requirements. Because of poor rural road conditions and low volume of trade, costs of transactions are high and trading margin is too low to attract investing in input trading. In addition to these factors, private traders lack necessary technical and management capacity, and institutional support such as access to marketing information and regulatory services.

4.2.24 The low volume of trade has worsened after the liberalization of input prices and subsidies because of contracting primary demand for fertilizer at farm level, particularly among small farmers who constitute 80 percent of the farm population. For example, level of fertilizer per hectare of area cultivated averaged about 7.5 kg in 1988, but it appreciably declined to 3.0 kg in year 2000. In 1989 and 1990, fertilizer use was below import levels, or, there was oversupply of fertilizers in the marketing channels. Although farmers are faced with improved output prices, particularly those who grow tradable products, fertilizer-crop price ratios remain unfavourable and farmers respond by cutting down the rate of fertilizer application (or, abandoning), expanding area of land cultivated, and diversify towards crops that are less sensitive to change in market or weather conditions. Expansion onto fragile lands and continuous intensification with out adequate replenishment of nutrients are bound to cause high environmental cost.

4.2.25. Whilst markets are open to private investors, they are not yet developed as evident from low market size, less than competitive market structure, and low technology uptake. Expanding

participation of the private sector calls on GOG to sustain stable enabling macroeconomic environment, create transparent legal environment to enforce contracts, provide technical support such as regulatory services, market intelligence and information, invest in such public goods as roads and communications, and promote as well as strengthen trader and farmer groups to reduce costs of transactions.

4.2.26. Whilst it is hard to isolate and ascribe the effect of ASRP on agricultural performance, the ASRP objectives have been moderately met: increase in agricultural production, improvement in formulation and implementation of agricultural policies and programs, strengthening of delivery of agricultural support services (i.e., research, technology generation and extension), strengthening technical and managerial capacity within MOFA, disengaging MOFA from direct production and marketing activities, and private sector development. Hence, based on the above observations, the ASRP's achievement of its objectives and outputs is rated **satisfactory**.

4.3. Efficiency

4.3.1. Assessing cost efficiency of policy-based program poses both conceptual and methodological problems, as evident in the case of ASRP. First, attributing the trends in development objectives and outcomes to ASRP are difficult without controlling and isolating other intervening conditions. Second, the program is multi-component (also multi-financed with little coordination and harmonization) with different instruments and time paths. The value added due to the program is not a simple addition of the different components because of their complementarity. Third, valuation of benefits and costs from society's perspective is essential to operational meaning of "efficiency". Finally, there is an issue of whether these achievements are consistent with 'socially desired' distribution of income and welfare improvement. These questions, albeit more relevant in academic arena, are fundamental to adequately address 'cost efficiency of ASRP.'

4.3.2. The improved changes in agricultural technological, institutional and policy bases, and development performance are achieved at considerable financial and economic costs. Whilst no information is available on accounting of program costs, borrowed funds and technical assistance represented major cost components in the ASRP. However, delays in project implementation due to design and implementation problems indicate that the program could have been more cost-effective. But the extent of cost savings without these problems could not be simulated and established here.

4.3.3. Without basic accounting of the financial and economic costs of ASRP, it is also hard to rate cost effectiveness of the program –a weak form of cost efficiency. Whilst the program has probably contributed to improved performance of the agriculture sector, its value added and cost-efficiency remain largely unknown. Notwithstanding the lacunae of essential information, however, the strict adherence to planned financial outlays and sizable achievements of the ASRP indicate that the inputs into the program have not been out of line. Hence, the ASRP is presumably performed **satisfactorily** on its cost-effectiveness.

4.4. Institutional Development Impact

4.4.1 The main thrust of ASRP is to build and/or strengthen institutions – service providing institutions such as research and extension, agricultural markets, user-based institutions such as farmer-associations. As the capacity of these institutions improves, they are expected to economize on scarce agricultural resources and channel them into priority areas to meet development objectives.

4.4.2 The outcomes of ASRP already show that the program has had considerable impact on improving formulation of policies and programs, enhancing delivery of agricultural support services, and building rural institutions involving farmers, traders, and processors in influencing policy formation and implementation. Thus, its institutional development impact is rated **satisfactory**.

4.5 Sustainability

4.5.1 The ASRP has laid the foundations for improved agricultural policies, institutions in research, extension, and farmer or community-based institutions. Emphasis on private-sector market-driven agricultural process supported by right policies, institutional bases and investments in “growth movers” are key to sustain the achievements gained so far and get the agricultural sector growing at higher sustainable growth path. Therefore, the likelihood of sustaining the program’s achievements is rated **satisfactory**.

4.5.2 For sustaining these achievements, however, continuous public support is necessary in strategic areas. First, stabilizing the macroeconomic environment at high levels of aggregates is crucial. Second, the current low level of agricultural capital expenditures is insufficient and the dependency on long-term loans and grants is not sustainable. Third, the source of agricultural growth has to shift from land expansion at high economic and environmental costs to technology-led growth. Fourth, development of low-cost competitive markets and increased private sector participation are key to fill the vacuum left because of state withdrawal from provision of agricultural marketing and financial services. Finally, the current drive towards diversification is a necessary strategy, but the country has to continuously identify its comparative advantage in both domestic and international markets in line with changes in demand patterns.

4.6 Aggregate Performance Rating

The overall performance of ASRP is **satisfactory** on accounts of its relevance, attainment of its specific objectives (i.e., improvement in policy development and delivery of agricultural services, promotion of low-cost irrigation schemes, and initiation of private sector development), institutional development impact, and sustainability criteria. Significant progress has been made in policy reforms supporting market-based agricultural growth, building and strengthening institutions, and building human capital. The focus on enhancing the private sector and restricting the role of government to essential functions is the right strategy if the right mix is pursued. Sustaining these gains requires continues implementation of the requirements identified in 4.5. The challenges remain how to enhance the private sector to accelerate market-based agricultural growth to improve overall economic growth and living conditions.

4.7 Borrower Performance (Ref.: ADF-Specific Component)

4.7.1 The performance of the Government, particularly MOFA, was **unsatisfactory** with respect to the design and implementation of the ADF component of the ASRP. The ADF-component overran four years because of non-compliance of the loan conditions, delayed agreements among participating parties on implementation arrangement and mode of distribution, and inexperience of the staff responsible for managing the project

4.7.2 The Government created the PCU in MOFA as a substitute for PIU in Bank of Ghana in 1987. It assigned technical staff to manage the tasks of procurement and disbursement of the funds committed to ASRP including the ADF funds. However, PCU was slow in filling staff positions and

those who held positions did not have skills commensurate with the position requirements. The PCU was also slow in providing training for its staff. The tasks of procurement and disbursement were given to the PCU without familiarity with the Bank Group procedures and rules.

4.7.3 The switching of the implementation arrangement from BOG to PCU in MOFA was not consistent with the market liberalization reform. Because of the withdrawal of MOFA from direct distribution of inputs, the disbursement of the loan was halted until 1991. It restarted after the re-location of the project implementation from the PCU to PIU in Bank of Ghana in 1991.

4.7.4 Among the key conditions in the appraisal was for GOG to open and maintain the Cedi Fund Account with the Bank of Ghana for the purpose of depositing the local currency funds generated from sale of foreign exchange. The proceeds would have been used to finance domestic costs of development projects. The GOG did not establish the Cedi account and no explanation exists for its non-compliance.

4.7.5 There was no monitoring mechanism built into the ADF component and the project was not monitored to the satisfaction of the Bank Group. Progress reports and audits, as required by the Bank, were not implemented. Communications between the Bank group and government agencies were weak. There is little institutional memory of the activities of the Bank Group within MOFA and Bank of Ghana because of staff turnover and poor documentation.

4.7.6 It is hard to ascertain whether the main explanation of the poor performance of the borrower was lack of policy commitment and accountability or competence. The level of commitment of the GOG to macro-and sector-policy reform was adequate. However, MOFA did not show as much commitment to ADF component of ASRP. Instead, it was more committed to the institutional and human capacity components of the ASRP, which were financed by the other co-financiers. MOFA did not also have the competence to engage fully in the different components and cycles of ASRP simultaneously.

4.8 Bank Group Performance

4.8.1 The ADF commitment to ASRP was in response to GOG expressed need, and it was consistent with the Bank's country strategy for Ghana. Agriculture is the leading recipient of the Bank's resources, particularly ADF resources, and it is a focal vehicle for poverty reduction. Whether committing all the ADF resources to short-term BOP support within the ASRP was the right choice of instrument is questionable, particularly in a context where the co-financiers did not coordinate adequately in design and implementation phases to find synergy and maximize the complementarity of the different components of ASRP. By choosing to focus on provision of funding for financing inputs only, the Bank group missed the opportune time to engage in policy dialogue and influence the future of agriculture in the country.

4.8.2 The performance of the Bank with respect the appraisal and implementation of the ADF component is rated **unsatisfactory**. The appraisal was not informed by understanding of key constraints holding agricultural growth. The appraisal was done quickly with no adequate technical, financial and economic analysis. The commodities identified in the appraisal and the planned financial allocations were mere listing with no analytical rigor. Consultations with informed officials, academics, and donors were not adequate, as evident from the Bank's reactive (delayed) responses to price and market liberalization policies.

4.8.3 Quick loan disbursements were planned without having in place an operational implementing institutional mechanism. As indicated in section 3.1, the Project Coordinating Unit within MOFA was established in 1987, but it was not fully staffed and trained to procure and disburse agricultural inputs. The PCU was entrusted with tasks of procuring and disbursing agricultural inputs, but it was not adequately familiar with the Bank's procurement procedures and rules.

4.8.4 There was no logical framework with indicators to monitor the performance of the ADF component. It was not adequately monitored, supervision was weak, and the requirements stated in the appraisal were not enforced. Except for the final project completion report, no progress reports were submitted to ADB on implementation of its components of the ASRP. No audit reports also exist. These key missing performance records raise serious issue of failure in project governance and accountability that have remained unattended.

4.8.5 Although ASRP was co-financed, the participants operated independently in appraisal and implementation of the different components of the ASRP. The ADF focused on purchases of inputs. The IDA/World Bank funds were used to enhance capacity for policy formulation and implementation within MOFA, strengthen agriculture support services (agricultural research and extension), pilot-test small-scale irrigation schemes, and finance manpower training. The project completion of these different financiers shows no trace of coordination in design and implementation of these different components of the same program –ASRP.

4.9. Factors that Affected ASRP Implementation Performance and Outcome

4.9.1 The performance of the agriculture sector has been and is still being greatly influenced by external factors such as weather, demand for export commodities in world market and associated changes in commodity prices. These factors continue to cause periodic downward fluctuations in agricultural production.

4.9.2 Internally, GOG has made considerable progress on formulation of macro and sector-specific policies. ASRP was positioned in the right policy reform context. But, the level of MOFA commitment to ADF component was inadequate as demonstrated in its assignment of staff without adequate training in project management, poor monitoring of the performance of the project, and non-compliance with key loan conditions and reporting requirements.

4.9.3 No clear guidelines were given to the implementing agencies on their duties and responsibilities. The switching of implementing agencies aggravated the situation. The implementing agencies were slow in filling positions and training their staff. For the PCU staff, the ADF project was perceived as a short-term intervention with little incentive in terms of training and logistic support. Both the PCU in MOFA and PIU in BOG failed to adhere to the monitoring, supervision and reporting requirements.

4.9.4 The ADF-component overran a period of four years partly due to implementation problems: weak implementation capacity both in terms of administrative arrangement and skill level, switching of locations of implementation, ineffective communications between the participating parties (the Bank Group and MDAs), weak supervision and response to solving implementation problems, and poor commitment and incentive at project level.

5. CONCLUSIONS, LESSONS, AND RECOMMENDATIONS

5.1. Conclusions

5.1.1 The macroeconomic and agriculture-specific policies that have been in place since the mid-1980s have contributed to recovery of agricultural growth. The recovery has been particularly strong in the export crops, especially in Cocoa sub-sector. But getting prices right has not been sufficient in the non-tradable crop sub-sector where supply response has been low. Without continuing investing in infrastructure to reduce transportation costs that represent between 40 to 70% of marketing costs, enhancing uptake of technological change, and creating enabling environment for private sector to invest in agriculture; agricultural growth remains weak.

5.1.2 The agriculture rehabilitation focus of the ASRP was timely and complementary with the then on-going policies of macroeconomic stabilization, liberalization of agricultural prices and markets, and re-orientation of the role of government in agriculture. The emphasis on addressing policy, capacity building and institutional development was essential to enhance the supply responsiveness of the agriculture to improved price incentives.

5.1.3 Whilst it is hard to isolate and ascribe the effect of ASRP on agricultural performance, the ASRP objectives have been moderately met: increase in agricultural production, improvement in formulation and implementation of agricultural policies and programs, strengthening of delivery of agricultural support services (i.e., research, technology generation and extension), strengthening technical and managerial capacity within MOFA, disengaging MOFA from direct production and marketing activities, and private sector development. The PPER mission notes these positive developments.

5.1.4 However, there are key areas of sustainability that need to be addressed. First, growth in agriculture continues to be mainly through increases in area cultivated, but such source of growth is likely to diminish as availability of land becomes scarce. Continuous pushing of land frontier and/or intensifying land use without sufficient technological change are bound to have high economic and environmental costs.

5.1.5 The second area is fostering the development of the private sector. For Ghana to accelerate agricultural growth, GOG has to continuously engage in stabilizing the macroeconomic environment (preferably maintaining balances at high levels), providing adequate financial, institutional and human resources, enhancing competitiveness of markets including financial services, and building broad-based rural institutions.

5.1.6 Future agricultural strategy needs to address these core issues, while continuing agricultural policy development, building institutions including markets, enhancing technical and management capacity, and effectively monitoring effects of public policies on effectiveness of achieving development goals.

5.2. Lessons Learned

The design and implementation of the ASRP program in general and the ADF component in particular present the following lessons:

- i) For satisfactory compliance of terms of loans, it is necessary that terms are clear and agreed, and project governance is strictly adhered and enforced. For example, the issue of hiring an independent consultant for procurement was not resolved to the satisfaction of all parties, and the GOG did not fulfil the requirement of establishing the Cedi Account.
- ii) A project/program's scope is generally related to the technical and managerial capacity of its implementing and monitoring agency. In the case of ASRP, the switching of its implementing agencies (ref. 3.1.2), and inadequacies in their technical and managerial capacity in project implementation, considerably delayed completion of ADF quick disbursement funds.
- iii) Formulation of project or program has to be strictly consistent with sequencing and timing of policy changes. For example, the switching of the management of ADF funds from Bank of Ghana to MOFA was not consistent with policies of market and price liberalization. Later in 1991, the execution of the ADF loan was re-located within the BOG. Although this happened three years after the loan became effective, it was nevertheless the right policy decision since such policy combines desirable elements of providing balance of payment support, targeting funds to purchases of agricultural inputs, and supporting participation of private sector.
- iv) Improved communication, adequate supervision, and flexible but correct timely response to problems are necessary supported with carefully prepared MPDE for logical consistency to ensure implementation of a project is on track. Where these elements are weak, as in the case of the ADF component, responses are either delayed or incorrectly applied.
- v) Since quick disbursing loan is by definition short-term and strictly time-bound, it becomes less relevant and effective as implementation is prolonged. The urgency of importing fertilizers in 1988-89 was not relevant in 1992 and 1993 since lack of demand, but not supply, was the factor limiting fertilizer use in early 1990s.
- vi) Whilst tracing uses of funds disbursed through auction market is desirable, validating such uses is problematic since such funds are fungible. A better and cost-effective policy is to include requirements such as policy-reform and creation of local-currency account as conditions for disbursement of funds. These types of requirements were either missing or not implemented in the ADF component.
- vii) In a development program involving different co-financiers and components, it is cost-effective to coordinate design and implementation, and harmonize choice of instruments. The outcomes of ASRP could have been larger (or more effective) if the complementary components were carefully integrated, such as combining project loan

with technical assistance and institutional building or synchronizing channelling of inputs through government agencies (ADF) and market liberalization.

- viii) Private sector response tends to be low in an environment where costs of capital for investment are high and uncertain, costs of transactions are high relative to return, and return on investment is uncertain. Continuous public participation in provision of public goods, creating legal framework, and forming partnership are essential.

5.3. **Recommendations**

(i) For the Borrower

- (a) The future sources of agricultural growth have to come mainly from improved productivity growth and competitiveness of domestic and international markets. It is, therefore, recommended that MOFA should focus on enhancing these sources of growth through greater participation of the private sector, which has so far been slow.
- (b) MOFA faces new set of constraints today, particularly with the decentralization of the Ministry since 1997 (ref. 4.2.10, 4.2.14, 4.2.18, 4.2.23, and 4.2.25). With the administrative decentralization, new skills are necessary that permit improved and effective development, implementation and monitoring of policies, programs and projects. Whilst MOFA continues operating with scarce public resources that are closely coordinated with macroeconomic and poverty reduction policies, it is also recommended that greater effort be made at developing a critical mass of new skills, particularly at local administrative levels.
- (c) From the experiences of the design and implementation of ADF project within ASRP, there were problems related to compliance with terms of loan and project administration (ref. Chapter 3 and section 4.1). These problems persisted as evidenced from the year 2000 annual portfolio review report: weakness in project implementation and monitoring, non-familiarity with the Bank's rules and procedures, and delays in counterpart funds. It is therefore recommended that GOG takes a proactive role to participate in designing projects and programmes, building effective monitoring and evaluation system, and coordinating donors effectively in support of agriculture.
- (d) Projects that stall their operations when foreign financing is absent are hardly cost-effective and sustainable. It is, therefore, recommended that counterpart funds be adequately provided and timely disbursed.
- (e) Privatisation of agricultural markets is an important step towards creating functional competitive market structures, but its process has to be carefully tailored to different stages of market development in rural areas (ref. 4.2.22-4.2.25). Complete state withdrawal in early stage, while the private sector needs improved infrastructure, access to finance and market information, and functioning legal framework, may retard the growth process. It is therefore recommended that liberalization and privatisation of markets be properly sequenced and timed to ensure orderly development.

(ii) For the Bank

- (a) The ADB has taken significant actions to improve effectiveness of project performance since the mid-1990s: enhance ownership of projects through stakeholders participation; improve project identification based on CSP, PRS and sector-specific reviews; increase frequency and quality of supervision and reporting; and increased technical assistance to enhance quality-at-entry. However, these actions have not yet improved quality of projects in Ghana, as evidenced from recent country portfolio review reports. This PPER recommends ADB to step up its efforts, with emphasis on the following actions.
- (b) **Informed Project Identification:** Identification, preparation and appraisal of a project need to be guided by sound understanding and knowledge of binding conditions that limit development in a country. In the case of agriculture, analysis of agricultural performance, key growth constraints, and public policy towards addressing these constraints need to be understood. The Bank country strategy paper, agriculture policy strategy and PRSP are key inputs that need to be effectively utilized. For the Bank staff to be adequately informed and design a quality project that eventually will pass the test of development effectiveness, they require adequate time and resources. In addition, the incentive by which the performance of a staff is judged needs to reflect its quality, not only its quantity.
- © **Strengthen portfolio Management approach:** Instead of approaching project-by-project, a portfolio approach permits developing strategic projects with strong synergies in terms of value-added to development objectives. The current focus on sector-wide approach in Ghana is the right approach if the country is able to effectively coordinate with donors.
- (d) **Align loan portfolio to implementation capacity of RMCs:** It is necessary to either align project/program's scope to the technical and managerial capacity of its implementing and monitoring agency or combine project lending with training and technical assistance. As the Bank staff, who reviewed this report commented, the Bank could achieve a lot if it acknowledged the slow speed of operations of RMCs at design stage, and opted for realistic implementation plans and focused on high-quality development interventions. Such design needs to be reinforced by carefully prepared MPDE that shows logical consistency between hierarchy of objectives, and between inputs, process and output.
- (e) The current aid coordination in the current comprehensive development framework, which is pilot tested in Ghana, is a step in the right direction for the Bank Group to participate. However, greater harmonization and coordination among donors are necessary, to ensure there are adequate consultations in setting priority intervention areas, scheduling implementation, and monitoring and reporting. These elements are also likely to economize on scarce implementation capacity of a borrowing country like Ghana.

- (f) **Establish effective M&E and response system:** Adequate assessment of implementation capacity, instituting monitoring and evaluation system, and effective responses to changing conditions are necessary to ensure projects are executed in line with agreed objectives, timelines, and implementation plans. Where necessary, it is essential to build training into the system to enhance capacity.

- (g) **Engage in pro-active Policy dialogue:** Donors meet regularly with the GOG to resolve policy issues. Within the CDF framework, donors coordinate project preparation, appraisals and monitoring, and co-finance programs and projects. The Bank Group participation is notably absent in policy dialogue and aid coordination.

REFERENCES

ADB/ADF Documents

ADB, Ghana: Country Portfolio Review Mission –BTOR (OCCW/MM/KM/02/03/040), April 2002.

ADB/ADF, Ghana: Letter to the Governor and Brief on the Bank Group Operation, Prepared for the Annual Meetings of the Boards of Governors, Addis Ababa, Ethiopia, May 2002.

ADB/ADF, Ghana: Country Portfolio Review Report, December 1998.

ADF, Appraisal Report--Agricultural Sector Rehabilitation Programme: Ghana (GHAB/PAAA/87/01), 1987.

Department of Agriculture and Rural Development, Northern Region, Republic Of Ghana: Project Completion Report – Agriculture Sector Rehabilitation Programme, March 1995.

Country Department, West Region, Ghana: Country Strategy Paper Update (1999-2001), October 2001.

OPEV, Revised Guidelines of Project Completion Report (PCR) Evaluation Note and Project Performance Evaluation Report (PPER), ADB/BD/OPEV/2001/85, January 2001.

Government of Ghana Documents

Directorate of Agricultural Extension Programme, MOFA, Agricultural Extension Policy, April 2001.

Directorate of Agricultural Extension Programme, MOFA, National Agricultural Extension Project – Implementation Completion Report, April 2000.

Ghana Poverty Reduction Strategy 2002-2004, An Agenda for Growth and Prosperity, Analysis and Policy Statement, February 2002.

Ghana Statistical Service, Poverty Trends in Ghana in the 1990s, October 2000.

IFDC (International Fertilizer Development Center), An Action Plan for Developing Input Markets in Ghana, October 2001

MOFA (Ministry of Food and Agriculture, Food and Agriculture Sector Development Programme, November 2001.

MOFA (Ministry of Food and Agriculture), Republic of Ghana: Accelerated Agricultural Growth and Development Strategies in Support of Ghana's Vision 2020, February 2001.

MOFA, Medium Term Agricultural Sector Development Plan: An Agenda for Sustained Agricultural Growth and Development (1996-2000), Main Report, June 1996.

National Development Planning Commission, The First Medium-Term Development Plan, Accra, July 1997

SRID (Statistics, Research and Information Directorate), MOFA, Agriculture in Ghana: Facts and Figures, January 2001.

Other Sources

Casey-Hayford, L., Reaching the Poor through Agricultural Development: A Synthesis of Findings, October 2001.

Aryeetey, G., J. Harrigan, and M. Nissanke, Economic Reforms in Ghana: the Mirace and the Mirage, Woeli Publishing Services, ???

Gyimah-Boadi, E., Ghana Under PNDC Rule, CODESRIA Book Series, 1993.

The Institute of Statistical, Social and Economic Research (ISSER), The State of the Ghanaian Economy in 2001, University of Ghana, Legon, June 2000.

World Bank, Implementation Completion Report-Ghana-Agricultural Services Rehabilitation Project (Credit 1801-CH), May 1995.

World Bank, Agricultural Services Subsector Investment Project: Project Appraisal Document, June 2000.

World Bank, Agricultural Sector Performance Review and Accountability Implementation Completion Reports, June 2000.

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Evaluation Criteria

No	Component Indicators	Score	Remarks
1	Relevance and quality at entry	3	Satisfactory
1.1	Consistency with country overall development strategy	3	Promote agriculture-led economic growth and reduce poverty
1.2	Consistence with Bank assistance strategy	3	Conforms with the Bank overarching goals of poverty reduction, private sector development
1.3	Macro-economic policy/sector policy	3	In line with macroeconomic policy reform and liberalization of prices and markets, and support to private sector development
1.4	Poverty reduction/social equality	3	Aims to reduce poverty through increase in agricultural income
1.5	Human resource development	3	Primary objective is to build skills
1.6	Institutional/private sector development	3	The programme focuses on building institutions
1.7	Quality at entry	3	No major shortcomings
2	Achievement of Objectives and Outcomes	3	Satisfactory
2.1	Agricultural policy goal	3	Agricultural growth recovery, modest economic and overall economic growth
2.2	Social objectives	3	Poverty reduction without worsening income distribution
2.3	Institutional development objectives	3	Significant improvement in policy making capacity, strengthened agricultural support services, and enhanced market institutions
2.4	Private sector development	3	Public commitment at highest level and major efforts underway
3	Efficiency	3	No evidence the outcomes of ASRP were not commensurate with inputs.
	Cost-effectiveness	2	Program could have operated at lower cost if implementation problems were corrected timely
4	Institutional development Impact	3	Satisfactory (justifications in 2.3)
5	Sustainability	3	Satisfactory Necessary foundations are in place, but weakness in provision of counterpart funds, monitoring and evaluation, and private sector development
6	Aggregate Performance Indicator	3	Satisfactory

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Borrower Performance

No	Component Indicators	Score	Remarks
1.	Quality of Preparation	3	Satisfactory: Government committed to policy reform, but no sufficient ownership and involvement in design of ASRP.
2	Quality of Implementation Assignment of key staff Managerial performance of executing agency Adherence to time schedule and costs mid-course adjustments	2	Unsatisfactory: Assigned staff but with no experience and slow in training. Project implementation over run four years because of problems of compliance, skill deficiency of staff, and unsatisfactory managerial performance.
3	Compliance with Covenants	2	Unsatisfactory: Compliance was not complete; abandoned hiring an independent agent, and no Cedi account was created as required.
4	Adequacy of monitoring & evaluation and reporting	1	Highly unsatisfactory: No M&E system built, no progress report, and project not audited. No trace of project activities at PPER.
5	Satisfactory operations	NA	
6	Overall performance	2	Unsatisfactory

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Bank Performance

No	Component Indicators	Score	Remarks
1.	At identification/preparation/appraisal Project consistency with government strategy project consistency with Bank strategy for country relevance of Bank support Timely Bank support Quality of analyses Adequacy of lending instrument Quality of co-ordination Implementation and supervision plans	2	Unsatisfactory: Consistent with government and Bank strategy, relevant and timely. However, focus on purchase of inputs was not adequately justified, weak analytical work in preparation, poor coordination with donors in design, and no logical framework.
2	Quality of supervision Problem solving Adequacy of follow up on recommendations Attention to sustainability issues	2	Unsatisfactory: Problems of communication, slow to problem solving, poor enforcement of requirements.
3	Overall performance	2	Unsatisfactory

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Factors Affecting Implementation Performance and Outcome

Factors	Substantial	Partial	Negligible	N/A	Remarks
1. Not subject to Government control					
1.1 world market prices		-			Changes in export crop prices (e.g. cocoa)
1.2. natural events (rainfall)		-			Periodic droughts
2. Subject to Government control					
2.1. macro/sector policies	+				Improved performance of agriculture and overall economy
2.2. Government commitment		+			Positive to policy, market reform, and private sector reform, and
2.3 appointment of key staff		-			Inadequacy in skills
3 Subject to executing agency control					
3.1 staffing		-			Inadequate training and motivation
3.2 monitoring and evaluation	-				No performance indicators and monitoring
4 Factors affecting implementation					
4.1 change in implementing agency		-			Project delayed.
4.2 mismatch between scope and implementation capacity		-			Newly formed agency unable to effectively manage project activities
4.3 abandoning of hiring agency/inefficient procurement		-			Slowed procurement
4.4 quality of management		-			Low skills, poor incentive, and weak monitoring and responding to problems
4.5 conflict with policy reform		-			Forced adjustments and delayed implementation

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Retrospective Matrix of the Logical Framework (ADF-Specific)

Hierarchy of Objectives	Objectively Verifiable Indicators			Means of Verification	Risks/Assumptions
	Indicator	Appraisal	PCR or PPER		
<u>Overall Objective</u> Improve aggregate income and reduce poverty	Real GDP growth (%) Poverty –head counts (%)		5.7% in 1983-89 4.4% in early 1990s	Ghana statistical service	
<u>Program Objectives</u> Increase agricultural production	Growth in Ag GDP (%)		2.8% in 1984-90 2.7% in early 1990s 4.4% in second half of 1990s	Ghana Statistical Service	
<u>Activities/Inputs:</u> Purchases of : Fertilizer Agrochemicals Equipment and spares Livestock inputs Fisheries inputs Tires and tubes Raw materials	UA Million	6.028 1.538 865 2.063 468 1.423 1.717	2.386 768 730 1.114 1.515 6.182 1.403	Project documents	