



Report Number : ICRR0020851

1. Project Data

Project ID

P105256

Project Name

MW - Agric Dev Prog Support Project

Country

Malawi

Practice Area(Lead)

Agriculture

Additional Financing

P128576,P148769

L/C/TF Number(s)

IDA-44760,IDA-50690

Closing Date (Original)

15-Sep-2013

Total Project Cost (USD)

200,800,000.00

Bank Approval Date

24-Jun-2008

Closing Date (Actual)

30-Dec-2016

IBRD/IDA (USD)
Grants (USD)

Original Commitment

32,000,000.00

0.00

Revised Commitment

62,000,000.00

0.00

Actual

53,879,648.78

0.00

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Project ID

P148964

Project Name
MW- Second AF to Ag SWAp Support
Project (P148964)
L/C/TF Number(s)

TF-92100

Closing Date (Original)
Total Project Cost (USD)

100,000,000.00



Bank Approval Date

19-Mar-2014

Closing Date (Actual)

IBRD/IDA (USD)

Grants (USD)

Original Commitment	0.00	100,000,000.00
Revised Commitment	0.00	100,000,000.00
Actual	0.00	73,644,276.62

Project ID

P106671

Project Name

MW-Agriculture Development GEF
(SIP) (P106671)

L/C/TF Number(s)

TF-92100

Closing Date (Original)

15-Sep-2013

Total Project Cost (USD)

53,300,000.00

Bank Approval Date

24-Jun-2008

Closing Date (Actual)

15-Sep-2013

IBRD/IDA (USD)

Grants (USD)

Original Commitment	0.00	5,800,000.00
Revised Commitment	0.00	4,760,892.98
Actual	0.00	4,760,892.98

2. Project Objectives and Components

a. Objectives

The project's development objective (PDO) and global environmental objective (GEO) as articulated in the Project Appraisal Document (PAD, p. 10) were to:

"improve the effectiveness of investments aimed at food security and sustainable agricultural growth," and to ***"strengthen the natural resource base in agricultural lands through doubling the area***



under sustainable land management as a basis for securing ecosystem services and sustainable agricultural productivity."

The project's development objective (PDO) and global environmental objective (GEO) were identical in both the Financing Agreement (FA, p. 6) and the Global Environment Facility Grant Agreement (P. 8) and were stated as one statement with no clear distinction between the PDO and GEO as to:

"improve the effectiveness of investments aimed at food security and sustainable agricultural growth, and strengthen the natural resource base in agricultural lands through a doubling of the area under sustainable land management as a basis for securing ecosystem services and sustainable agricultural productivity."

b. Were the project objectives/key associated outcome targets revised during implementation?

Yes

Did the Board approve the revised objectives/key associated outcome targets?

No

c. Will a split evaluation be undertaken?

No

d. Components

The project included three components:

1. Institutional Development and Capacity Building in Preparation of a Sector Wide Approach in Agriculture (appraisal cost US\$15.03 million, actual cost: not reported in the ICR-see section 15 of this Review). This component would support the strengthening of the harmonized investment strategy underlying the sector wide approach, capacities would be strengthened to: (a) evaluate trade-offs in investment priorities and define a credible investment program; (b) translate broad ADP objectives and results into annual work plans; (c) better coordinate investments derived from multiple sources; (d) consolidate annual work plans and budgets for the sector (e) track a range of different funding sources/ budgets; (f) implement procurement in an efficient and timely manner; (g) effectively monitor outputs and outcomes based on the project's targets and the Malawi Growth and Development Strategy 2006-11 ; (h) plan and manage human and financial resources; and (i) operationalize the MoAFS HIV/AIDS and gender mainstreaming policy and strategy. It included four sub-components:

1.1. Management and Coordination Support to strengthen the Ministry of Agriculture and Food Security leadership and management needed for a sector wide approach.

1.2. Planning, monitoring and evaluation support. To strengthen the capacities of the Department of Planning, and Agricultural Development Divisions (ADDs) and district agricultural offices to engage in more effective agricultural sector planning; and monitoring and evaluation.

1.3. Technical systems and skills development. The project would provide financial resources for Ministry of Agriculture and Food Security to address institutional development and capacity building of its technical departments through selective professional training to fill key gaps in technical expertise.



1.4. Administrative systems development. The project would support Ministry of Agriculture and Food Security in addressing priority professional and administrative skill gaps through training, equipment and technical assistance.

2. Sustainable Food Security (appraisal cost: US\$37.62 million, actual cost: not reported in the ICR). This component would support the implementation of three priority agendas outlined in the project's investment framework that relate to the enhancement of food security – maize productivity growth, sustainable land management, and the development of national capacity for market based risk management. It included two sub-components:

2.1. Sustainable Productivity Growth Initiative. The use of improved technology options for sustainable smallholder maize-based cropping systems would be enhanced by a combination of improved practices for sustainable yield growth and enhanced adaptation to rainfall variability and soil degradation through: choosing the right varieties, efficient fertilizer use, sustainable land and rainwater management; and reducing post-harvest losses. The project would enhance the coordination and strengthen capacities of agricultural research and extension services to respond more efficiently to farmer needs and promote sustained smallholder productivity gains.

2.2. Strengthening market based agricultural risk management strategies. The project would institutionalize the use of rainfall-index based early warning models, macro weather insurance, micro weather insurance, maize Supply/Price Hedging Strategies, warehouse receipt system; and capacity building for integrated commodity risk management as a key component of national risk management systems.

3. Project Coordination (appraisal cost: US\$0.65 million, actual cost: not reported in the ICR). This component would aim to manage and use resources in accordance with the project's objectives and procedures.

Revised Components

During the restructuring of the project subsequent to additional financings, there were some changes to the project components, as summarized below:

Component 1. Institutional Development and Capacity Building in preparation of a SWAp. Activities added: new sub component on land administration capacity strengthening aimed at supporting policy decision making processes by providing up-to-date information and analysis on land management and land use planning. This involved development of land information system to help Ministry of Lands, Housing and Urban Development (MoLHUD) ensure secure recording of deeds, with specific objective of monitoring evolution of land use under estates management.

Component 2. Sustainable Food Security, Agricultural Growth and Diversification. The component name was reformulated to reflect additional activities to diversify maize based farming systems and strengthen support to Farm Inputs Subsidy Programme (FISP). Activities added were: (a) support to FISP and Seed Monitoring/Certification, (b) sub component on legume crop production and marketing, and (c) sub component on improving agribusiness environment and promote agribusiness partnerships.

New Component was added to the project by the first additional financing (AF1) on February 27, 2012:



4. Improvement and maintenance of unpaved rural roads (appraisal cost: US\$49.2 million, actual cost: not reported in the ICR). The inclusion of a rural roads component was aimed at improving market access of inputs and outputs of agricultural produce. This component aimed to finance improvement works on unpaved rural roads and implementation support.

e. Comments on Project Cost, Financing, Borrower Contribution, and Dates

Project Cost. The project was expected to cost US\$53.3 million. Actual project cost as reported by the ICR (Annex 1) was US\$46.34 million. The difference from the appraisal amount was due to lower amounts disbursed from IDA funds (see below for more details). The project received two additional financings, the first additional financing (AF1) on February 27, 2012 for US\$30 million from IDA Credit and the second additional financing (AF2) on March 21, 2014 of US\$120 million from a Multi- Donor Trust Fund (MDTF). The total estimated project cost including AF1 and AF2 was US\$215.70 million. The actual amount disbursed according the ICR (Annex 1) was US\$154.98 million. The difference stemmed mainly from lower disbursement of the MDTF which reached US\$76 million compared to an expected amount of US\$120 million.

Financing. The project was financed through a Specific Investment Loan comprising an IDA Credit of US\$32.00 million equivalent, a GEF Grant of US\$5.80 million on joint co-financing basis, and a US\$10.00 million Government of Norway Grant. Actual amounts disbursed from these according to the ICR (Annex 1) were US\$26.14 million, US\$4.70 million, and US\$10.00 million for the IDA Credit, GEF Grant and the Government of Norway Grant, respectively. On February 27, 2012 the project received the first additional financing comprised of an IDA Credit of US\$30.00 million. The actual amount disbursed was not reported as a disaggregated figure, the ICR (Annex 1) reported that the total IDA funds disbursed were US\$53.88 million. On March 21, 2014 the project received a second additional financing comprised of US\$120 million from a Multi-Donor Trust Fund (MDTF) funded by Norway, European Union (EU), Irish Aid, United States Agency for International Development (USAID), Government of Flanders and Department for International Development (DFID). The actual amount disbursed from the MDTF was US\$76.00 million (ICR, Annex 1).

Borrower Contribution. The Government contribution was expected to be an in kind contribution equivalent to US\$3.20 million and the project beneficiaries would contribute an in kind contribution equivalent to US\$2.30 million. Actual amounts disbursed were not reported by the ICR.

Dates. The project was expected to close on September 15, 2013. The actual closing date was about three years and three months later on December 30, 2016. The project was restructured three times, all Level 2 restructuring. The first was on September 28, 2011, when the amount disbursed was 54.61% of the original IDA Credit, in order to amend to the Financing Agreement, the premium and transaction fee payable to IDA for the weather derivative transaction was to be deducted by IDA and paid out of the proceeds of the Credit prior to the execution of the weather derivative transaction; and allow for reallocation of funds under component 2. The Second restructuring was on February 27, 2012 when the amount disbursed was US\$21.71 million, in order to approve an additional IDA Credit of US\$30.00 million. These would fund scaling-up ongoing activities to increase the number of farmers receiving support from



the project; and include new interventions in the field of agricultural diversification and access to markets. During this restructuring, the project name was changed from Agriculture Development Programme Support Project (ADP SP) to Agriculture Sector Wide Approach Support Project (ASWAp SP); and a new rural roads component, with the objective of enhancing project outcomes by increasing access to agricultural input and output markets was added. The closing date was also changed from September 15, 2013 to June 30, 2015. The third restructuring was on March 21, 2014, when the amount disbursed was US\$42.33 million, in order to approve an additional financing of US\$120.00 million from a Multi- Donor Trust Fund (MDTF). This permitted scaling up the activities further based on the components agreed at the first restructuring. Also, the closing date was extended to December 31, 2016. The Midterm Review was carried out on April 26, 2011 compared to an original date on December 14, 2011.

3. Relevance of Objectives & Design

a. Relevance of Objectives

Malawi is a densely populated landlocked country with a population of about 13 million people. Its economy is based on agriculture, which accounts for more than 80% of export earnings, contributes 38% of gross domestic product (GDP), and provides a livelihood for 85% of the population. Smallholder farmers (less than one acre of land) allocate approximately 85% of their land to maize production. Most continue to experience difficulty producing enough grain to meet their consumption requirements, so maize productivity growth remains essential for achieving food security. The ecological degradation of productive land and water systems, affects about 30% of Malawi's population. High labor requirements, and uncertainty about investment returns, have created a barrier to the adoption of sustainable land management practices. Therefore, agricultural intensification needs to be linked with conservation efforts.

At project appraisal, objectives were in line with the Government of Malawi's priorities for the agriculture sector as outlined in the Malawi Growth and Development Strategy 2006-2011 (MGDS). The MGDS focused on agriculture as the driver of economic growth, and recognized that food security was a prerequisite for economic growth and poverty alleviation. The Strategy also called for increasing agricultural productivity and integrating smallholder farmers into commercial activities. Also, the project would facilitate implementing the Government of Malawi's strategy for agriculture sector through enhancing administrative and management systems in the Ministry of Agriculture and Food Security, improving budget execution, strengthening decentralization of service supply, and increasing the effectiveness of the Agricultural Input Subsidy Programme (PAD, pages 8 & 9). Objectives were also in line with the Bank's Country Assistance Strategy for Malawi (CAS) covering FY07-10, in particular CAS outcome 1 which called for improving smallholder agricultural productivity and integration into agro-processing and outcome 4 which called for sustained improvements in fiscal discipline, budget execution, and accountability of civil service (CAS, p. 25).

At project completion, objectives continued to be in line with the Government's priorities for the agriculture sector, as emphasized in the medium term development strategy (2011 to 2016), where agriculture and food security remained a priority area. Objectives also were in line with the Bank's Country Assistance Strategy for Malawi (CAS) covering FY13–FY16. The CAS (pages 6 & 30) focused on promoting sustainable, diversified and inclusive growth through increased productivity and commercialization of agriculture and sustainable



management of water resources. Objectives were also in line with pillar 1 (under competitiveness and employment) of the World Bank's Africa Strategy which aimed to contribute to public investments in agricultural productivity and employment, in particular .

The PDO mirrored the sector wide approach for the agricultural sector, which included high level impacts and outcomes that were both complex and ambitious; and eventually caused attribution challenges for the project. Based on the above mentioned information, objectives were substantially relevant at appraisal and continue so at completion.

Rating

Substantial

Revised Rating

Not Rated/Not Applicable

b. Relevance of Design

Design included a broad statement of objectives. The Results Framework did not provide clear links between project inputs, outputs and expected outcomes. Nevertheless, the detailed project description (PAD Annex 4) adequately covered these aspects. The project's design sought to use Government systems to implement the project and pooled donor resources together (through MDTF) to support the project. Design also emphasized capacity building and institutional development at national and local levels, and promoted multi sectoral implementation and coordination among government institutions. To achieve the stated objectives, design featured three components with multiple activities. The first component would contribute to achieving the stated objective through supporting capacity building for improved agricultural sector planning and investment management. This was expected to harmonize government and donor investments in support of a medium term investment strategy for agricultural food security and growth and lead to the establishment of a sector wide approach in the agricultural sector. The second component would contribute to achieving the stated objectives through promoting a sustainable improvement of national and household food security by supporting maize productivity growth, sustainable land and rainwater management, and the application of new tools in market based risk management. The third component focused on project management and ensuring that resources would be used in accordance with the project's objectives and procedures. The activities supported by the project were relevant and plausibly linked to the PDO. However, as observed by the ICR "the causal link from component activities and outputs to outcomes cannot be considered totally unambiguous" as "factors extraneous to the project could reasonably affect project outcomes." (para 41). Design could have benefitted from a detailed capacity assessment of the Government's departments and Ministries involved in the implementation of the project. For example, "in the absence of the Core Function Analysis (CFA) of the Ministry of Agriculture (not finalized by the time the project started), it was not clear what capacity priorities the project can support" (ICR, para 15). This raises concern about the relevance of activities under component 1. The Government's ICR (p. 14 shared by the project team) stated that "in the absence of the CFA, trainings were planned annually and included in the Annual Workplan and Budgets based on perceived needs of the Departments and Districts."

Relevance of Design after scaling up the project. Design remained the same throughout implementation with no changes except for the addition of a new component to improve market access of inputs and outputs of agricultural produce through supporting improvement and maintenance of unpaved rural roads. The new component was relevant and linked to sustainable agriculture growth. However, design overall



remained complex with many activities and numerous implementing departments involved. It covered all 28 districts, after scaling up, "amidst weak capacity of Government at various levels" (ICR para 44); and that made monitoring and achieving depth of interventions challenging.

Based on the afore mentioned information, relevance of design suffered from major shortcomings and therefore it is rated modest.

Rating
Modest

Revised Rating
Not Rated/Not Applicable

4. Achievement of Objectives (Efficacy)

Objective 1

Objective

PDO: to improve the effectiveness of investments aimed at food security and sustainable agricultural growth.

Rationale

Outputs

- **Improved alignment of Ministry of Agriculture, Irrigation and Water Development organization and budget with the project's investment framework and agriculture sector portfolio.**
 - The project secretariat was formed and instituted within the Department of Planning of the Ministry of Agriculture; and the Ministry's plan and budget and reporting fully aligned to the project's framework.
 - The project's dialogue platforms in place and operational. These were the Executive Management Committees (meets bi-annual), the Joint Sector Reviews (bi-annual), the Agriculture Sector Working Group (quarterly), 7 Technical Working Groups (each meeting monthly). These structures brought together various stakeholders to discuss and review sector performance, promote mutual accountability.
 - The project developed through wide consultation, guiding sector investments and dialogue. This was implemented from 2010 to 2016.
 - Joint work plan and budgeting (and review) between Ministry of Agriculture and other ministries; Joint Sector Review, Sector Working Group, Technical Working Group active, involving other ministries and stakeholders
- **Improved delivery of core agriculture public services with respect to the project.**
 - M&E Master Plan for the project developed.
 - Supported development of policies and studies: Review of Strategic Grain Reserves and eventual development of new Strategic Grain Reserves guidelines; National Agriculture policy, Contract Farming Strategy, Agricultural Risk Management Strategy, Post-Harvest Loss Study, National Agriculture Investment Program.



- **Strengthened capacity on land administration/management and assessment of land availability.**
 - Review of Titles and deeds registration system resulting in its abandonment based on gaps in the capture of all land processes, and the development of a new Land Information Management System. Equipment requirements for the new Land Information Management System were reviewed and consolidated.
 - 368 staff were trained in land administration and management.
 - 58,733 land piece files were digitized. Analysis showed that 500,000 hectares of land were idle, including underutilization of estates, and 74% expired leases.
 - Seven Land Governance Technical Working were functional and held meetings (from earlier Land Governance Assessment Framework Task Force). TA support to land component in Ministry of Lands.
 - Among ten new land bills, seven were enacted and assented: these were expected to promote access to land for commercial agriculture and to strengthen land tenure security.
 - An estate performance survey was underway
- **Capacity building of staff in planning, budgeting, internal communication, M&E.**
 - Trainings in budgeting, M&E, communication (staff and farmers). M&E focal points trained on results M&E, revised tools developed and used (engendered). The ICR did not provide the number of trainees.
 - Agriculture Statistics Strategic Master plan developed, operational to improve coordination, harmonization of agricultural statistics. Under this activity, two pilot estimates were carried out to improve crop estimates and recommendations were incorporated in current crop estimates methodology.
- **Trainings.** Overall, two-thirds (66%) of the planned trainings were actually undertaken with 1,013 beneficiaries compared to a target of 1,528 beneficiaries.
 - Supported staff training at PhD level (4, target: 7), MSc/MA (71, target: 132), BSc/BA (57, target: 219), Diploma (369, target: 430), Short Courses (512, target: 740).
 - Training curriculum developed, Memorandum of Understanding signed between Ministry of Agriculture, Irrigation and Water Development and Lilongwe University of Agriculture and Natural Resources to train 200 field assistants.
- **Trials, demonstrations and farmer try outs (varieties, fertilizer use, sustainable land management and nutrient use).**
 - Maize seed research trials: 71 maize varieties identified for research led trials; 10,943 on-farm research trials; 114,686 farmer tryout plots; 75% farmers using composite and hybrid maize varieties (1.2 million ha). Not clear how many new maize varieties were disseminated to farmers. Approximately 4,060 MT of certified seeds (legumes) made available through the Farm Input Subsidy Program (target: 3,500 MT, baseline: 2,800 MT).
 - 3,973 metric tons of winter maize were produced by private sector under winter production for 2016 humanitarian support.
 - 65,000 banana plantlets imported, however, the ICR (p. 67) reported that 25% of the plantlets bought were not in a good condition; 52,058 clean banana plants distributed to 5,602 farmers (target: 11,732 farmers in two districts).
 - 23 Non-Governmental Organizations contracted to distribute planning materials for cassava and



sweet potatoes under emergency response; 203,734 farmers supported, over 3,877 ha cassava and 7,450 ha planted with sweet potatoes

- Crop nutrient management trials: 5,991 on-farm research trials (115,590 participating farmers), 57,977 farmer try out plots (57,977 farmers)
- Sustainable land and water trials: 8,163 on farm research trials (8,171 farmers participating), 99,297 farmer try out plots
- 23 soil maps were produced showing soil health, with recommendations for area specific fertilizers.

• **Extension strategy revised to promote pluralistic provision.**

- Agricultural Extension Policy Review finalized (informing development of agricultural extension advisory strategy – underway).
- 423 District Agricultural Extension Service System structures formed and were operational, 28 District Agricultural Committee, 18 District Stakeholder Panel, 349 Area Stakeholder Panel, 28 District Agricultural Extension Coordination Committee.
- Supported 15,646 demonstrations, 723 field days, 7,66 clusters).
- Publications and communication included 17,173 publications, 468 radio programs, 319,683 Information Education Communication materials, and 30 documentaries.
- Cooperative development trainings were provided for 493 staff, 2,714 farmers, and in total 157 cooperatives were supported.
- 329 Farm Business Schools were formed and 3,3326 farmers were trained and two NGOs (DAPP and Find Your Feet) contracted to deliver extension services, 23000 lead farmers were trained and relaying extension services to 557,437 farmers compared to a target of 900,000.
- 147 staff and 19,460 farmers trained were trained in Nutrition and dietary diversification and 896 integrated homestead farming gardens were in place. No targets were set for these activities in the ICR.
- 646 staff and 40,946 farmers were trained in Gender and HIV/AIDS mainstreaming, and a gender and HIV/AIDS strategy for agriculture sector developed. No targets were set for these activities in the ICR.

• **Improved seed production, certification and monitoring procedures.**

- Through developing a New National Seed Policy (pending review at cabinet level) and supporting the Seed Services Unit supported with over 15,555 ha inspected per year; Socotec contracted for external seed testing in 2014 season.
- Legume seed revolving fund in place (for early generation seeds, fund order managed by DARS) and 204.3 MT breeder seeds produced by Department of Agricultural Research and Consultative Group on International Agricultural Research (CGIAR) including ground nuts, pigeon peas, soybeans and common beans.
- 2,088 MT of legumes were produced (from 1,272 ha. planted at smallholder farmer level).

• **Strengthening market based risk management strategy (weather derivatives, micro weather insurance, warehouse receipt system) through:**

- Developing an Agriculture Risk Management Strategy; Contract Farming Strategy; Communication Strategy for micro and macro insurance; regulatory framework for micro insurance; Assessment of Micro Weather Insurance; Development of Warehouse Receipt Bill (at cabinet level)



- Technical Working Group on ARC formed, Capacity building on customization of Africa Risk Capacity (20 members trained); and supporting dissemination of weather reports.
- 34 automated weather stations installed, however, no information whether these were operational.
- 57 Farmer Organizations trained on business management advisory services and 37 proposals developed for matching Public Private Partnerships (PPP) grants arrangements.
- **Smallholder area under conservation agriculture, sustainable management.**
 - 210,806 ha under Conservation Agriculture (target; 200,000 ha); National Conservation Agriculture Guidelines developed; 45-member core team of trainers in place for the guidelines and 129,156 ha put under complimentary soil and water conservation practices.
- **Legal and regulatory reforms to business environment.**
 - 185 magistrates were trained in commercial courts; National Trade facilitation; Public Private Dialogue Forums; 40 SMEs trained in meeting standards for exports; Communication of doing business reforms and setting up task forces to tackle specific issues; market intelligence (1); 3 trade fairs.
 - Refurbishment of commercial court in Lilongwe Registry, civil procedure rules, Insolvency act, companies act, warehouse receipt bill were all reviewed. A commodity exchange regulatory framework was developed, an exports ban study; aflatoxins awareness strategy and skills development plan were carried out.
- **Improvement and maintenance of unpaved rural roads.**
 - 143 Km of rural roads were rehabilitated (target, 185 Km, partially achieved), 384 Km of rural roads made transmittable through spot improvement (target: 364, achieved and target exceeded). Total roads improved amounted to 527 Km compared to a target of 549 Km. In a further communication, the project team explained that the original target was 780 km (260 km rehabilitation, 520 km spot improvement and upgrading). This was revised downwards after DFID pulled out some of its commitment to a total of 549 km (185 km rehabilitation, 364 km spot improvements and upgrading).
 - The project contributed to strengthening capacity for road maintenance through developing an Environmental and Social Management Plan and Road maintenance strategy; training on new technology for low volume sealed roads was provided for 28 contractors, 67 people/contractors were trained in financial management, 25 people were supported in study tour on rural roads, and the Roads Authority received Technical Assistance (TA) support under the project .

Outcome

The project reached 3.10 million beneficiaries of which 48.2% were females (exceeding the target of 3.00 million, 50% of whom were to be females). The evidence provided in the ICR revealed that the project contributed to building targeted technical, managerial and administrative capacities in the Ministry of Agriculture, Irrigation and Water Development. It also improved institutionalization of Agriculture Sector Wide Approach as well as intra and multi-sectoral coordination such as transport, trade, roads, lands. The project also supported policies and reforms to improve the functionality of the agricultural sector. There is evidence also that the project contributed to increasing yield in maize and improving food security. The project



achieved one out of five PDO indicators (number of beneficiaries), and the achievement rate on the other four indicators was 90% for maize productivity, 98% for budget execution, 81% for food security and 96% for rural roads. Therefore, outcome is rated substantial.

That said, it is worth noting that assessing the PDO relied to some extent on national level indicators such as crop estimates and food security status which could have been affected by other external interventions beyond the control of the project. Also, the assessment of outcomes would have benefitted from a baseline study and/or a final impact assessment study.

Rating

Substantial

Objective 2

Objective

GEO: to strengthen the natural resource base in agricultural lands through doubling the area under sustainable land management as a basis for securing ecosystem services and sustainable agricultural productivity

Rationale

Outputs

- **Smallholder area under conservation agriculture, sustainable management.** 210,806 ha under Conservation Agriculture (target; 200,000 ha); National Conservation Agriculture Guidelines developed; 45-member core team of trainers in place for the guidelines and 129,156 ha put under complimentary soil and water conservation practices.

Outcome

The project promoted sustainable land management practices including: conservation agriculture, manure, catchment management and other nutrient management practices. These practices aimed at increasing soil organic matter in conservation farming areas in order to improve crop productivity. According to the ICR (p. 28 para 52) soil organic matter status measured in sandy soils in conservation farming areas reached 3.2% compared to a target of 1.5% and a baseline of 1%. The project also exceeded its target for the area put under conservation agriculture practices (210,806 ha compared to a target of 200,000 ha). However, it was not clear in the ICR the area of the impacted sandy soils, and how sampling was carried out; and there was no reporting on any control areas that did not receive benefits from the project.

In a further communication during the preparation of this Review, the project team explained that "organic matter was expressed as quantity of organic matter divided by total soil weight (in %). The actual figure was being measured by soil sampling when initiating conservation farming trials in a given area and at the end of the project in application areas. Soil samples were being grouped by soil types and cropping systems using Land Resources Department data. A total of 8,162 research trials were mounted across the districts where data was collected."



The GEO is not rated.

Rating

Not Rated/Not Applicable

5. Efficiency

Economic and Financial Efficiency

ex-ante

- The economic and financial feasibility of the Project was determined through the application of the evaluation method known as discounted funds flow cost-benefit analysis.
- The financial analysis was conducted to assess if the targeted smallholders (direct beneficiaries) got financial benefits that justify their adherence to and participation in the project. The financial analysis assumed that beneficiary smallholders (average about 1 ha farms) could have three levels of benefits: from capacity building of the groups and organizations to which they belong; more intensive and efficient agricultural extension and research services; and from on-farm productive agricultural investments. The overall financial rate of return (FRR) of the project considering costs of the component 2 (Sustainable Food Security) was estimated at 18%.
- The economic analysis was carried out to know the cost effectiveness or contribution of the project as a whole from the perspective of the country's economy. The discount rate adopted was 12% per year, considering that it reflected the opportunity cost of capital in Malawi, and the time required to make the projection of discounted funds equal to zero. The economic rate of return (ERR) was estimated at 37%.
- Sensitivity analysis was carried out to determine the effects of increasing incremental costs, reducing incremental incomes, and delaying the projects benefits. A 20% increase in the incremental costs would reduce its financial return rate to 11%; a 20% reduction in the projected incremental incomes would reduce the FRR to 10%; and if the achievement of the expected incremental benefits were delayed a year the FRR would drop to 14%.

ex-post

- The ex-post economic and financial analysis followed the same approach at appraisal except for updating the data. The project had a national scope and reached 3.1 million rural smallholders, or about 78% of the total farming households in the country, that benefitted directly at least from one of project activities.
- The analysis focused only on Component 2, Sustainable Agricultural Growth and Food Security,



specifically Sustainable Productivity Growth Initiative (subcomponent 2.1) and Promotion of Legume Production and Marketing (sub-component 2.3) that generated direct financial benefits by productivity and production increases as a result of: increased cropping intensity for smallholders with project as compared to the situation without project; and sustainable productivity increases per unit of labor, land and inputs (i.e. fertilizers, seeds).

- The financial analysis used 2016 market prices. The Financial Rate of Return (FRR) for sub-component 2.1 and 2.3 activities of the project was estimated at 39%.
- The economic analysis used the import parity price because maize, the staple crop of the country was a restricted commodity and it was most likely the country would import maize rather than export. Using the same assumptions for the Financial analysis and applying the economic prices, the economic rate of return (ERR) was calculated to be 35% at 12% discount rate.
- According to the ICR (p. 54, para 14) the calculated ERR at ICR was less than the base rate of 37% at appraisal for two reasons, first, data availability was poor and quality low since critical information required to undertake such an analysis were not systematically monitored and documented during project implementation; and weather shocks (droughts and floods) that affected the country during the project implementation period. Second, the appraisal estimate might have overstated the benefits to accrue from the investments which resulted in an overestimated ERR.
- Sensitivity analysis showed that a 10% increase in the incremental costs would reduce the FRR to 36% while a 10% reduction in the incremental benefits reduced the FRR to 35%; and if a 10% percent incremental benefit was achieved, then the FRR would increase to 43% (ICR, p. 43, para 11).
- The rural roads component received about 23% of the project funds. A cost effectiveness analysis would have helped to assess the efficiency of this investment.
- The cost of the Farm Input Subsidy Programme FISP exceeded both the amount initially budgeted at appraisal and the budgets calculated during the project's two restructurings (by over US\$12.00 million). In a further communication, the project team explained that "the additional support was in response to the request from Government based on the funding gap on the seeds component of the FISP. This came within the context of high food insecurity context, and the need to ensure reduced humanitarian caseloads in the years to follow. Additional willingness was provided, also within the context that commitment on the FISP reforms was observed, hence the need to deepen implementation in order to improve efficiency and effectiveness of FISP implementation."

Administrative and Institutional Efficiency

The project closed about three years and three months later than the expected closing date. It experienced a slow start by almost twenty months largely due to delays in Parliamentary approval. Project implementation also suffered delays due to high staff turnover, delays in procurement at both national (headquarters) and district council levels; late submission of financial reports and liquidation that affected flow of funds to implementing departments and districts, and a weak Monitoring and Evaluation (M&E) system that negatively impacted data collection and analysis needed to inform decision making.

Overall, efficiency is rated substantial despite financial management weaknesses.



Efficiency Rating

Substantial

a. If available, enter the Economic Rate of Return (ERR) and/or Financial Rate of Return (FRR) at appraisal and the re-estimated value at evaluation:

	Rate Available?	Point value (%)	*Coverage/Scope (%)
Appraisal	✓	37.00	62.00 <input type="checkbox"/> Not Applicable
ICR Estimate	✓	35.00	62.00 <input type="checkbox"/> Not Applicable

* Refers to percent of total project cost for which ERR/FRR was calculated.

6. Outcome

Relevance of objectives was rated substantial and relevance of design was rated modest. Efficacy was rated substantial because evidence provided in the ICR revealed that the project contributed to building targeted technical, managerial and administrative capacities in the Ministry of Agriculture, Irrigation and Water Development. The project also improved institutionalization of Agriculture Sector Wide Approach as well as intra and multi-sectoral coordination such as transport, trade, roads, lands. Efficiency was rated substantial despite financial management weaknesses.

a. Outcome Rating

Satisfactory

7. Rationale for Risk to Development Outcome Rating

Risk to the development outcome is rated substantial based on the following:

- **Environmental risk.** The risk to the GEF objective is high given the population growth that according to the ICR (para 64) "led to further land degradation, unsustainable agricultural practices which pose a threat to sustain soil fertility and organic matter in the soils."
- **Institutional risk.** The institutional arrangement of the project has been put in place with active project secretariat steering coordination and leadership. Such dialogue mechanisms are still functional, supported by the Ministry of Agriculture's budget, and sometimes by other donors. However, there is a need to fully institutionalize the project's secretariat within the mainstream Ministry of Agriculture's operations in order to sustain the gains. Also, the lack of adequate capacity in the decentralized structures, particularly on financial management raises concern whether funds would be used for the intended purposes. Finally, under the roads component, resource constraints at national level and inadequate capacity of community road



maintenance clubs remain a significant risk to achieve sustainability.

a. Risk to Development Outcome Rating

Substantial

8. Assessment of Bank Performance

a. Quality-at-Entry

- The Government of Malawi (GoM) requested the Bank's support as a lead donor in the development and implementation of the Agricultural Development Program (ADP); and requested assistance from the Bank to improve the environmental sustainability of its agricultural productivity growth and food security initiatives under the ADP.
- The program was designed as a sector-wide approach which sought to bring several development partners to support GoM's agricultural development agenda and sought to use existing structures of the Ministry of Irrigation and Water Development at national, divisional and district levels.
- The project was financed through a fully blended operation of International Development Association (IDA) and Global Environmental Facility (GEF) resources in addition to co-financing with other donors. Such mechanisms minimized transaction costs and improved coordination and harmonization.
- Project design benefited from sound technical analysis during preparation and wide consultations within the Bank (across the sectors), donors, non-state actors and Government in designing the project. Design also reflected a number of lessons from previous Bank projects and other similar interventions including Irrigation Rural Livelihoods Agriculture Development Project (IRLADP); Community Based Rural Land Development Project (CBRLDP), emergency projects and other program-based and agricultural sector wide approaches in neighboring countries (e.g. Tanzania and Mozambique). Notable lessons reflected in the design included: improving national ownership, institutional reforms and strengthening leadership; linking sector programs and decentralization process; and involvement of private sector and civil society constituents.
- However, a notable shortcoming was the complexity of the project design given the multiple activities in relation to the limited capacity of the implementing institutions. This made it difficult to monitor and achieve depth of interventions especially with weak implementation capacity of the client and decentralized structures in the country. Design could have benefitted from a thorough assessment of the Government's implementation capacity, including monitoring and evaluation prior to implementation. Also, the management arrangements of the project activities proved challenging due to the lack of a specific Project Implementation Unit (PIU). This made project implementation subject to institutional rigidities that at times delayed implementation of activities (ICR, p. 39, para 73).
- Ten risks were identified at the appraisal stage, one was substantial, seven were moderate and two were rated low. Most of these identified risks materialized during project implementation, but with varying



degrees of severity. However, the Government's proposed mitigation measures were generally inadequate or took a long time to mitigate them (ICR, p. 19, para 22).

- M&E suffered from design and implementation weaknesses (see section 10 a, b for more details).
- Based on the above mentioned information, QAE suffered from major shortcomings and is therefore rated moderately unsatisfactory.

Quality-at-Entry Rating

Moderately Unsatisfactory

b. Quality of supervision

Bank supervision missions were bi-annual and were well staffed with key technical specialists, consultants, fiduciary specialists and safeguards. A total of 16 supervision missions were completed throughout implementation of the project. By 2014, the Bank country office was fully staffed to manage the MDTF. The presence of full time project task team leaders and technical staff in the country improved follow up of project issues and engaged the client on policy issues and reforms as it affected the project. Trust Fund Management Committee meetings were held every six months (after implementation support mission) to brief the committee on progress and outstanding issues. The Bank also held monthly meetings with the client to discuss progress and actions agreed in the implementation support missions. To improve financial management and control, the Bank put in place 8 Justification Officers in the Agricultural Development Division. The Bank also addressed skill gaps through the provision of relevant capacity building trainings. However, the Bank should have carried out further assessments prior to scaling up the project to a national level -- which not only resulted in over extending project interventions, but also posed monitoring challenges. Also, weaknesses in the M&E system could have benefitted from earlier support in the implementation phase.

Quality of Supervision Rating

Satisfactory

Overall Bank Performance Rating

Moderately Satisfactory

9. Assessment of Borrower Performance

a. Government Performance

The Government demonstrated commitment and ownership to the project which was implemented following Government systems and structures. The Government provided personnel to coordinate the project, including desk officers at all implementing levels, as well as office space. The Executive Management Committee under the Ministry of Agriculture (with participation of other implementing Ministries: Ministry of Local Government and Rural Development, Ministry of Finance, Ministry of Industry, Trade and Tourism,



Ministry of Lands, Housing and Urban Development, and Ministry of Transport and Public Works) met bi-annually to provide strategic oversight of the project work plans and budgets. However, ownership, leadership and traction by implementing departments was a problem in the first years of implementation. This later improved through capacity building efforts, strong leadership and close supervision of the project (ICR, para 72). Also, the Core Function Analysis (CFA) of the Ministry of Agriculture was only completed in the last year of project. This affected implementation of the training plan as it was not clear what capacity priorities the project could support.

Government Performance Rating

Moderately Satisfactory

b. Implementing Agency Performance

The project was implemented under the Ministry of Agriculture and Food Security (MoAFS). There was no separate project implementation or decision making entities since the project used MoAFS and the Agricultural Development Program (ADP) existing structures. The ADP Executive Management Committee (EMC) acted as the project's Steering Committee and had overall oversight and decision making responsibility for the project, including formal approval of work plans and budgets and review of quarterly and annual reports. Day to day management of the project was carried out by a senior management officer. However, in the initial years, the project had limited traction due to lack of clarity on leadership. This improved when the Government appointed a dedicated Project Coordinator and additional Government officers and consultants to oversee the implementation and coordination of the project.

Overall, effective implementation of the project was undermined by a number of factors including: high staff turnover-- which resulted in high vacancy rates (for both technical and fiduciary staff), delays in procurement at both national (headquarters) and district council levels; late submission of financial reports and liquidation affected flow of funds to implementing departments and districts, and weak Monitoring and Evaluation (M&E) systems to collect and analyze the data needed to inform decision making. Finally, at closing, there were incomplete project activities such as training of staff at diploma and Masters levels, consultancies (development of Agriculture Extension Strategy, Land Information Management Systems, Estate performance Survey, and design and automate the business and work permit processing and issuing system), and civil works (ICR, p. 19, para 24).

Implementing Agency Performance Rating

Moderately Unsatisfactory

Overall Borrower Performance Rating

Moderately Satisfactory

10. M&E Design, Implementation, & Utilization



a. M&E Design

The M&E unit at the Department of Planning under the Ministry of Agriculture, Irrigation and Water Development was responsible for the overall project's M&E activities. Other departments involved in M&E activities included: Ministry of Finance and Research and Extension departments at the Ministry of Agriculture, Irrigation and Water Development. The project's original Results Framework consisted of four outcome and nine intermediate outcome indicators. These indicators were taken from the Agricultural Development Program/Agriculture Sector Wide Approach results framework; and were also selected for their contribution to the Malawi Growth and Development Strategy M&E system. This ensured project alignment to Government initiatives; and that Government reporting, monitoring and evaluation systems were used to monitor project indicators (ICR, p. 73, para 57).

However, the PDO indicators were contributing to higher level objectives beyond the control of the project; and could potentially be affected by other external interventions. The use of national level indicators, for example, crop estimates and food security status, to measure the project performance created attribution issues. This was evident with the PDO indicators on maize yields, food security, investment budget execution; where outcomes could be attributed to other external factors and interventions beyond the project (ICR, p. 24, para 41). The ICR (p. 59, para 8) stated that the indicators were not adequate to capture effectiveness, food security, improved access to markets, and sustainability. The four-year maize average yield and the percentage of food secure households were too ambitious and attributing their performance to the project only was questionable. Furthermore, indicators suffered from the lack of a baseline study which made some indicators "lose their relevance" (ICR, p. 73, para 58) while others had unrealistic targets. Finally, some indicators proved difficult to measure, for example, the fourth and third outcome indicators, "percent of variation of intra-annual maize retail price in selected markets" and "levels of soil organic matter in conservation farming application areas" as well as two intermediate result indicators "average level of nitrogen use efficiency (kg maize/kg N applied)" and "number of farmers receiving micro weather insurance linked with agricultural credit" were all dropped because data was difficult to measure and collect.

b. M&E Implementation

The project had weak M&E systems at all levels in the Ministry of Agriculture (Headquarters, Division and District) to enable collection of information to assess returns to the project investments and capture beneficiary satisfaction (ICR, p. 20, para 27). The M&E capacity benefited from hiring additional consultants at the project coordination office. At project restructuring, indicators were increased to seventeen in order to reflect the new component (rural roads) and to better align the indicators with the PDO. The quality of the M&E reports gradually improved as a result of the capacity and technical assistance efforts through M&E consultants who working closely with M&E officers within the Ministry of Agriculture, Irrigation and Water Development.

c. M&E Utilization

The M&E framework and data along with detailed annual and quarterly M&E reports informed decision making and resource allocation during planning and implementation. The ICR (para 28) reported



that "indicators for the project results framework were all collected, without any gaps (at outcome and intermediary levels) and reporting timely during the implementation supervision mission reports."

Overall, M&E suffered from significant shortcomings particularly at the design stage followed by implementation, therefore M&E quality is rated modest.

M&E Quality Rating

Modest

11. Other Issues

a. Safeguards

The original project's environmental screening category was B, and the safeguards category was S2. It triggered OP 4.01 Environmental Assessment; and OP 4.09 Pest Management due to the potential adverse environmental and social impacts of its agricultural development activities. The borrower prepared an Environmental and Social Impact Assessment (ESIA) Report dated March 7, 2008. This report included an Environmental and Social Management Plan (ESMP); a Monitoring Plan (MP); and a Pesticides Management and Monitoring Plan. The report was approved and disclosed by the Government in Malawi on March 7, 2008, and was disclosed at the Bank's Infoshop on March 7, 2008. At the first restructuring stage dated February 27, 2012, a new component on rural roads was added to the project. This triggered an additional safeguard policy on Involuntary Resettlement (OP/BP 4.12), while maintaining the Category B rating.

Mitigation measures were coordinated through the Ministry of Agriculture (led by the Land Resources and Conservation Department) which included focal points in all implementing departments. Safeguards compliance was related for the most part to Component 2 and 4. Gender and HIV/AIDS were integrated as part of implementation of the Environmental and Social Management Plans (ESMP). The ICR did not provide information on the mitigation and safeguard compliance of the triggered safeguard policies. However, the ICR (para 30) stated that since safeguard was rated Satisfactory, this implied that "all safeguard issues were complied with."

The ICR (p. 35, para 62) stated that "there have been minor instances on the effect of road works affecting some farms of households through road works, particularly diversions. The project followed up the issue, while ensuring adherence to the Environmental and Social Management Plan. There is need for continued follow up to ensure that if compensations apply, the Government should pay the affected households accordingly."

b. Fiduciary Compliance

Financial Management. The project had adequate budgeting systems and plans approved by the World Bank before implementation started. The financial accounting software (TOMPRO) was operational at the national level, but it took time for all financial records to be entered in the system. Audit reports were delayed



and there was late liquidation of funds from districts and lack of adherence to controls and procedures. This resulted in qualified audit reports. The ICR (para 31) reported that the "previous external audit done was qualified with potential ineligible expenditures amounting to MK47.93 million (approximately US\$65,650)." In a further communication during the preparation of this Review, the project team explained that "on the US\$65,650 ineligible expenditures, communication was sent to Government of Malawi to initiate a process to refund the ineligible expenditures back to the trust fund, in line with World Bank procedures. Once refunded, the amount will go back to the trust fund, as income for the second successor project under preparation." The main reason for financial management weaknesses was the lack of competent staff at all levels (Headquarters, Departments and district level) needed to manage the project's resources. Financial management benefited from the recruitment of a Finance Management Specialist and 2 assistants who were trained in World Bank finance management procedures. They worked closely to empower finance staff from Agriculture and other implementing Ministries. Such efforts improved the FM performance towards the end of the project. Overall, financial management was weak and according to the ICR (p. 72, para 51) "between 2010 and 2014, financial management was continuously rated as unsatisfactory." According to the project team, the latest audit report covering period up to June 2016 was submitted in December 2016 – Government provided some supporting documents which were being reviewed by the external auditor. Any declared ineligible expenditures will follow the same World Bank procedures so that a refund is made back to the trust fund.

Procurement. The project experienced procurement delays that stemmed from lack of capacity. This ultimately resulted in implementation delays especially when there was heavy demand on procurement processes. Also, some procurement delays resulted from the government's bureaucratic delays as well as poor coordination with technical staff when initiating some procurement aspects (ICR, para 33). The project benefitted from recruiting two procurement specialists (consultants) to support the implementing Ministries on procurement matters. Improvements included timely submission of procurement plans, and initiating necessary procurement processing according to World Bank procedures.

c. Unintended impacts (Positive or Negative)

d. Other

12. Ratings

Ratings	ICR	IEG	Reason for Disagreements/Comment
Outcome	Satisfactory	Satisfactory	---
Risk to Development Outcome	Substantial	Substantial	---



Bank Performance	Moderately Satisfactory	Moderately Satisfactory	---
Borrower Performance	Moderately Satisfactory	Moderately Satisfactory	---
Quality of ICR		Substantial	---

Note

When insufficient information is provided by the Bank for IEG to arrive at a clear rating, IEG will downgrade the relevant ratings as warranted beginning July 1, 2006.

The "Reason for Disagreement/Comments" column could cross-reference other sections of the ICR Review, as appropriate.

13. Lessons

The ICR included five lessons. The following are emphasized with some adaptation of language:

- **Complex projects in countries with limited implementation capacity need a dedicated project implementation unit (PIU) with qualified staff to ensure timely implementation of project activities.**

The use of Government systems and structures promoted ownership, but limited capacity and Government bureaucracies resulted in implementation delays. The complexity of a project warrants the establishment of a dedicated PIU with key qualified staff. Further, for projects that feature national coverage, the regional offices need to be considered for proper project backstopping, including on fiduciary matters.

- **Basket funding modalities (like MDTF) promoted coherence among donors in advancing reforms, policy positions, as well as flexibility and fast decision making.** The setup of the multi donor trust fund ensured that all donors mutually agreed to reforms and policy positions advanced with Government unlike in the past when there was discrete fragmented implementation. In turn, this reduces transaction costs towards decision making, and increases ownership and accountability of decisions.

14. Assessment Recommended?

Yes

Please explain

To verify the impact of the project on the ground.

15. Comments on Quality of ICR

The ICR provided good coverage of project activities and reported candidly on most shortcomings. Despite the complex and ambitious outcomes, the ICR, to the extent possible, provided a logical discussion of



outcomes. However, attribution was a concern. The ICR also included five lessons that reflected the project's experience.

The ICR could have improved on the following areas:

- The ICR (Annex 1) did not include a table that reflected actual and appraised costs of components.
- The ICR should report on all Restructuring events, in this case, the ICR reported on two out of three restructurings.
- Discussion of the GEO was minimal, and it was not clear whether it was achieved or not.
- Provide an explicit statement on compliance (or otherwise) for each of the triggered safeguards policies.
- Report on the status of external financial audit reports.
- The ICR included thorough information on M&E design, however, these were scattered under different sections of the document. Consolidating this information under the discussion of M&E design would have strengthened this section. The same was observed for the discussion on Quality at Entry.

a. Quality of ICR Rating
Substantial