



Report Number : ICRR0021055

1. Project Data

Project ID
P113032

Project Name
ET: Agricultural Growth Program

Country
Ethiopia

Practice Area(Lead)
Agriculture

L/C/TF Number(s)
IDA-47830,IDA-H6000,TF-99729

Closing Date (Original)
30-Sep-2015

Total Project Cost (USD)
417,800,000.00

Bank Approval Date
30-Sep-2010

Closing Date (Actual)
30-Apr-2017

	IBRD/IDA (USD)	Grants (USD)
Original Commitment	150,000,000.00	56,200,000.00
Revised Commitment	149,934,863.20	56,200,000.00
Actual	148,604,630.84	56,200,000.00

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Project ID
P127507

Project Name
ET: AF Agricultural Growth Program (P127507)

L/C/TF Number(s)	Closing Date (Original)	Total Project Cost (USD)
		50,000,000.00



Bank Approval Date	Closing Date (Actual)	
30-Nov-2011		
	IBRD/IDA (USD)	Grants (USD)
Original Commitment	0.00	50,000,000.00
Revised Commitment	0.00	50,000,000.00
Actual	0.00	50,000,000.00

2. Project Objectives and Components

a. Objectives

The Project Development Objective (PDO) was identical in both the Project Appraisal Document (PAD, p. 8) and the Financing Agreement (FA, p. 5) and aimed to:

"increase agricultural productivity and market access for key crop and livestock products in targeted Woredas with increased participation of women and youth."

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 PDO was supported by three components.

1. Agricultural Production and Commercialization (appraisal cost: US\$118.3 million; actual cost: US\$229.70 million). Included three sub-components:

1.1 Institutional Strengthening and Development. This would include establishment and strengthening of Agricultural and Rural Development Partners Linkages Advisory Councils (ARDPLACs). The project would extend the ARDPLACs to all covered woredas, support the already existing ARDPLACs at higher levels, and expand membership to include all key rural development stakeholders, including the private



sector. The project would also strengthen key public advisory services including the agricultural extension service, soil fertility management services and animal health services. The project would also support the establishment and strengthening of farmer organizations through: the establishment and strengthening of new and existing voluntary informal farmer groups and capacity building for both farmer organizations agencies supporting them.

1.2 Scaling Up Best Practices. Specific activities to be supported would include: identification of best practices and preparation of sub-project proposals. The extension service, in consultation with key stakeholders would identify improved technologies and management practices that respond to women, men, and youth farmers' stated needs as expressed in the investment sub-project proposals. The improved technologies for production would show adequate profitability and employ integrated approaches to nutrient, pest/disease, water, and land management. The project would also provide implementation support for scaling up best practice through supporting extension and innovation and adaptive research.

1.3 Market and Agribusiness Development. This sub-component would aim to strengthen agribusinesses along value chains of selected commodities through the establishment of an innovation and demonstration fund; private sector capacity building and technical assistance; public sector capacity development for service provision; promotion of linkages to credit, including a credit guarantee scheme; and sectoral analysis of constraints and value-chain analysis. The project would also support strengthening the supply systems of key inputs through supporting the seed sector and improving livestock breeds.

2. Small-scale Rural Infrastructure Development and Management (appraisal cost: US\$142.10 million; actual cost: US\$263.40 million). The project would finance the construction, rehabilitation, and/or improvement of small-scale infrastructure that contributes to increased productivity. These investments would also intend to improve mobility and access to markets. It included two sub-components:

2.1. Small-scale Agricultural Water Development and Management. Investments under this sub-component would include: development and management of small-scale and micro-irrigation (SSI) infrastructure and implementation of soil and water conservation practices. The project would support the provision of irrigation water and related services on about 18,000 hectares (of which about 13,000 hectares were under SSI schemes and the remaining 5,000 hectares were under micro-irrigation technologies) and the implementation of soil and water conservation practices over an area of 75,000 hectares.

2.2 Small Scale Market Infrastructure Development and Management. This sub-component would aim to strengthen rural market infrastructure to enhance the performance of input and output markets and linkages to agro-processing. The sub-component would finance the construction and/or maintenance of small-scale feeder roads, footbridges, and roadside drainage; development and management of market centers; and institutional development and capacity building at the woreda, kebele, and community levels.

3. Agricultural Growth Program (AGP) Management and Monitoring and Evaluation (appraisal cost: US\$18.80 million; actual cost: US\$35.60 million). Included two sub-components:

3.1. AGP Management at the Federal, Regional, Zonal, and Woreda levels. This sub-component would include a broad agenda for strengthening implementation capacity and for communicating lessons learned in the course of implementation.

3.2 Monitoring and Evaluation. Support establishing effective M&E and create a learning environment. The specific activities to be covered include: AGP inputs and outputs, outcomes and impact, and participatory M&E, social accountability, and internal learning.

- Woreda: is the third-level administrative divisions of Ethiopia. They are further subdivided into a number of wards (kebeles) or neighborhood associations, which are the smallest unit of local



government in Ethiopia.

- Kebel: is the smallest administrative unit of Ethiopia, similar to a ward, a neighborhood or a localized and delimited group of people.

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

Project Cost. The total project cost at appraisal was estimated to be US\$281.20 million including US\$ 29.0 million taxes and duties. Actual cost reported by the ICR (Annex 1) was US\$254.81 million.

Financing. The project was financed through an IDA credit worth US\$150 million and two Multi-Donor Trust Fund (MDTF) Grants worth US\$56.20 and US\$50.00 million. Total World Bank financing was US\$256.20 million. The project also received parallel financing from the United States Agency for International Development (USAID) worth US\$81.40 million, US\$2.40 million from the UN Development Programme (UNDP) and US\$56.20 million from unidentified Bilateral Agencies. Actual amount World Bank amount disbursed was US\$254.80 million. The ICR did not report the disbursement amount for non-World Bank sources.

Borrower. The Borrower and beneficiaries were expected to contribute US\$7.0 million and US\$20.80 million of counterpart funds, respectively. The ICR did not report on the actual amounts disbursed for both sources.

Dates. The project was expected to close on September, 30, 2015. The actual closing date was 19 months later on April 30, 2017. The project went through two Level II Restructurings. The first was on September 3, 2015, when the amount disbursed was US\$139.75 million, in order to extend the closing date of the IDA credit and grant by 9 months from September 30, 2015, to June 30, 2016. This extension was needed to accommodate delays in the implementation of the small-scale irrigation (SSI) schemes. Also, a number changes were made to the Results Framework including updating baselines, modifying end targets and measurement units, and modifying the wording of some indicators to clarify what exactly is to be measured and better track progress and achievements (Restructuring Paper, pages:5&6). The second was on June 22, 2016, when the amount disbursed was US\$148.60 million in order to extend the closing date of the IDA credit and grant for 10 months from July 1, 2016, to April 30, 2017. The second extension was mainly due to delays in infrastructure works because of the suspension of work by construction firms in areas of civil unrest, especially in Amhara and Oromia. This accounted for the largest share of the project's resources. In addition, heavy, unseasonal rains throughout the country from March to May 2016, and contractor underperformance contributed to the need for these extensions. Also, a reallocation of funds under the MDTF grant agreement was executed, which resulted in a reduced allocation to Component 1 (Agricultural Production and Commercialization) of US\$4.56 million and Component 3 (Management, M&E) of US\$7.62 million, as well as an increased allocation for small-scale rural infrastructure development and management work of US\$12.18 million. The Mid-term Review was carried out on March 10, 2014. The PAD did not include a specific date for the Mid-term Review, however, it stated that the Mid-term Review "will be carried out mid-way in the implementation phase (PAD, p. 144)."



3. Relevance of Objectives

Rationale

In Ethiopia, more than 80% of the population lives in rural areas and agriculture is their main source of income. The agricultural sector accounts for about 45% of GDP, almost 90% of exports, and 85% of employment. Nonetheless, food security continues to be a key challenge. Challenges for smallholder agriculture include low yields and environmental degradation due to unsustainable agricultural practices. The AGP will support investment in watershed management and small-scale water management and irrigation systems. These investments would significantly reduce the variability in agricultural production and would enable smallholders to take advantage of new and more profitable opportunities.

At appraisal, objectives were in line with the Government's Plan for Accelerated and Sustained Development to End Poverty (PASDEP-2006) which stated that the key challenge for reducing poverty and providing the foundation for long term growth was to ensure rapid and sustained increases in land and labor productivity. Objectives were also in line with the Government's Five Year National Development Plan that aimed to support smallholder agriculture by scaling up best practices with increased participation of the private sector development. Objectives were also in line with the first objective of the World Bank's Country Assistance Strategy (CAS-FY2008-11) for Ethiopia which considered raising agricultural productivity agricultural development in Ethiopia as one of the Bank's main goals. The CAS emphasized the need for a comprehensive strategy to enable vulnerable rural people to enter a sustainable path toward better economic lives. Objectives were also in line with the CAS Focus Area 3.3 (Support Greater Economic Engagement of Women and Youth).

At project completion, objectives were in line with the Government's second Growth and Transformation Plan (GTP-2015/16 to 2020/21), which emphasized a strong role for the agricultural sector in driving sustained economic growth and job creation. Objectives also were in line with Bank's Country Partnership Strategy for Ethiopia (CPS - FY2013-FY2016), specifically with Objective 1.3, which aimed to increase agricultural productivity and commercialization with a special focus on tackling the constraints that women face in agricultural commodity value chains.

While the statement of objectives was clear and focused, it lacked a connection to the final impact of increasing productivity such as reducing poverty, improving food security, among others. Also, the *"increased participation of women and youth"* was not clearly defined and posed a challenge for M&E. Based on the aforementioned information, relevance of objectives is rated substantial.

Rating

Substantial



4. Achievement of Objectives (Efficacy)

Objective 1

Objective

PDO: increase agricultural productivity and market access for key crop and livestock products in targeted Woredas with increased participation of women and youth.

As stated the PDO includes two sub-objectives:

- (a) increase agricultural productivity for key crop and livestock products in targeted Woredas with increased participation of women and youth; and
- (b) increase market access for key crop and livestock products in targeted Woredas with increased participation of women and youth

Rationale

sub-objective (a): increase agricultural productivity for key crop and livestock products in targeted Woredas with increased participation of women and youth. Rated: modest.

Outputs

The outputs below are from Annex 2 and Annex 10 of the ICR.

- By project completion 537,335 farmers (original target: 126, 000, revised target: 60,000) 84,903 of which were women (original target: 28,000), and 62,870 were youth (original target: 28,000) adopted best practice technologies (including: row planting, use of chemical fertilizers, the adoption of inorganic fertilizers, and the use of improved seeds) of crop, livestock, and natural resources management (target exceeded). In a further communication, the project team explained that the targeted crops included "chickpeas, wheat, teff, sorghum, barley, grass peas, field peas, rice, finger millet, haricot beans, niger seeds and potatoes. Livestock value chains included dairy, beekeeping, and animal fattening."
- 482,757 client days of training to raise agricultural productivity were provided to development agents, and other government officials, 39,174 of which were provided to women. In a further communication, the project team explained that extension capacity was improved through "equipping of extension offices – this included provision on office facilities (landline phones, office tables and chairs, computers); provided transport facilities including to development/extension agents – 960 motorcycles (10 per woreda), 96 vehicles, 4,485 bicycles provided at to extension agents at kebele levels."
- 331,380 client days of extension services provided to farmers and community members in farmer training centers, 132,552 of which were provided to women. In a further communication, the project team explained that about 2,027 Farmer Training Centers (FTCs) were furnished and 1,404 centers in all regions were rehabilitated. These investments made FTCs functional to serve farmers better, increased farmers' participation of training as the training environment improved significantly. Demonstrations included awareness creation on new varieties (maize, teff, wheat, forage etc.), adaptation trials of new crops including fruits, vegetables, cereals and fodder crops, cropping patterns (row planting, intercropping and double cropping, bee-keeping, poultry management, fattening, introduction of fruit trees. In addition, farmers also participated in experience sharing visits and field days.



- 275,356 beneficiaries, 87,131 of which were women, became members of an association, which were functional cooperatives, functional WUAs, functional seed producers, and functional Common Interest Groups (CIGs).
- 26, 528.32 hectares (original target: 9,000 ha, revised target: 15,000 ha) were provided with new irrigation and drainage services through SSI and micro-irrigation schemes, and 10,190 hectares (original target: 9,000 ha, revised target: 6,000 ha) was provided with improved or rehabilitated irrigation and drainage services. 8, 578 farmers benefited from the irrigation investments of new, improved, and rehabilitated schemes, 12,051 of which were women and 6,432 youth. 604 WUAs were operational under the project (original target: 178 WUA, revised target: 328 WUA), which ensured the sustainability of the schemes, 155 of which are legally registered.
- A total of 26,391 improved calves (13,028 heifers, 13,363 bulls) were produced in Oromia, but the calving rate was very low (e.g., 26% in Oromia, 22% in Amhara).
- 26 fruit nurseries were completed to encourage high-value crops in areas where the project had implemented irrigation and watershed development-related activities.
- Sustainable land management practices were adopted on 217,000 hectares (target: 75,000 ha). In a further communication, the project team explained that "practices that contributed to improvement in sustainable land management included the following: (a) 559 watersheds covering an area of 217,233 ha of land were established; (b) area closure of 9,881 ha to improve marginal land, rehabilitate water sheds and increase forest regeneration, and (c) physical structures such as stone bunds and check-dams were supported by other measures including fruit trees, grasses and other trees."

Outcome

The project achieved mixed results with regards to the yields of different crops, and achieved 64% of its outcome target with regards to the percentage increase in agricultural yield index. Women participation was lower than expected particularly for training activities, and critical activities, such as livestock-related activities, to gauge women participation were not assessed. Also, assessing of youth participation was minimal. Therefore, the outcome of this sub-objective is rated modest. The discussion below provides more detail on the aforementioned areas.

The increase in agriculture productivity was to be assessed through the percentage increase in agricultural yield of participating households. According to the ICR (p. 19) the agricultural yield index for all beneficiaries in the project woredas increased from 9.6 quintals per hectare at baseline in 2011 to 10.6 quintals per hectare at completion. This represents a 10.4% increase in the agricultural yield index or 64% of the final target of 16.2%. Also, the agricultural yield index for all female headed households in the project woredas increased from 9.4 quintals per hectare at baseline in 2011 to 10.4 quintals per hectare at completion, which was a 12.7% increment. However, agricultural yield index for youth headed households in the project woredas decreased from 10.00 quintals per hectare at baseline in 2011 to 9.50 quintals per hectare at completion, which represented a 5% decrease in the average yield index. The evidence provided in the ICR, which was based on the end-of-project household data, showed that the project achieved mixed results with regards to the yields of different crops. For example, yields at completion of rice, finger millet, teff, haricot beans, chickpea, and horse beans decreased by 8%, 8.2%, 9.2%, 9.7%, 16.6% and 27.2%, respectively. On the other hand, yields of niger peas, barley, wheat, sorghum and potatoes increased by 4%, 9.6%, 10%, 32% and 82%, respectively. The ICR (p. 19) attributed the lower than expected results to the fact that the data reflected yields from 2016 period which were generally lower than average due to a



drought that impacted the country, which was described by the ICR "as the worst in 50 years." On the positive side the results reported in the ICR (p. 20, para 41) showed that the agricultural yield index for the average AGP beneficiary was 56% higher than for the average household that did not benefit from the project. Compared to the average non-beneficiary household, the crop and milk yields for project beneficiaries were 58 and 43% higher, respectively. Similarly, female-headed households who benefited from AGP interventions had 52% percent higher crop yields and 41% higher milk yields compared to non-beneficiary female-headed households. While youth headed households who benefited from the project showed a 44% increase in milk yields compared to non-beneficiary youth headed households, the results did not show a significant impact on agriculture productivity.

With regards to increasing participation of women and youth. The impact of the project on women was expected to be captured through a specific analysis of women's activities (dairy; sheep and goats; poultry; and possibly backyard vegetables). While the project did a commendable effort to record gender disaggregated data for various activities, "many livestock-related activities, such as animal fattening, were not assessed because they were not captured in the household data" (ICR, p. 19, para 40). Women participation in training activities was generally lower than expected. For example, only 57 women participated in an experience sharing event after crop harvest which was planned for 556 women. Similarly, only 603 women attended a capacity building training designed for 1,139 women. The ICR (p. 50, para 24) attributed the low participation of women to the time constraint faced by women given their multiple roles in the household, including cooking, caring for children, fetching water and wood, and tending to agricultural production. On the other hand, the project faced challenges in capturing data on youth headed households due to difficulties in identifying this group. This consequently resulted in weak assessment of various outcome indicators related to youth (ICR, pages 24&25, para 52).

Rating
Modest

Objective 2

Objective

(b) increase market access for key crop and livestock products in targeted Woredas with increased participation of women and youth. Rated: substantial.

Rationale

Outputs

- 623 km of all-weather feeder roads (original target: 831 km, revised target:1,203 km) and 175 bridges (target: 80) were constructed under the project to improve the accessibility of the kebeles.
- 90 primary market centers and 2 terminal markets were built compared to a target of 60 primary markets and 8 terminals.
- Capacity building: training was given to 637 market center management committees and the project strengthened a total of 12, 827 CIGs, and 939 of these were promoted to the cooperative level through training, technical support and linkages to microfinance institutions.



Outcome

The evidence provided point to the success of project activities in increasing market access, despite some shortcomings. The percentage increase in the real value of marketed agricultural products (including livestock) per household increased by 25% from the baseline compared to a target of 21%. Therefore, outcome is rated substantial. The following discussion sheds light on the project achievements.

The project-financed investments in marketing infrastructure such as feeder roads, bridges, and market centers were expected to increase direct access to markets for rural agricultural households. As a result of these investments, the average distance to nearest market center for households in the project woredas decreased by 38% 27 km to 17 km (ICR p. 20, para 42). It also plausible to assume that improving market access would also enabled beneficiary households to get better pricing for their agricultural produce through selling directly to consumers rather than intermediaries. The ICR (p21, para 43) reported that the real value of revenues of marketed agricultural products for project beneficiaries increased by 25% compared to a target of 21%, and increased by 32% female headed house holds. However, youth-headed households saw a decrease in the real value of revenues of marketed agricultural products by 3%. The ICR also reported that based on the 2017 impact evaluation that agricultural revenues increased for crop, livestock and dairy products compared to 2009 baseline by 23%, 9% and 31%, respectively. The significant improvement in dairy sales was due partly to breed improvements promoted under the project.

With regards to increasing participation of women and youth, a 2017 Gender survey found that the project was effective in mainstreaming the concerns of women and youth beneficiaries. For example, women and youth were given priority access for the allocation of market shades.

Rating

Substantial

Rationale

Based on the considerable gains against Objective 2 and the reasonable gains against Objective 1 the overall rating for Efficacy is Substantial.

Overall Efficacy Rating

Substantial

5. Efficiency

Economic and Financial Efficiency

ex ante



- The economic internal rate of return (ERR) of the project was estimated at 19.9% with a net present value (NPV) of US\$138 million. The economic analysis was based on a 20-year period during which the project was expected to generate benefits. Based on an opportunity cost of capital of 12%, the project was expected to generate a satisfactory ERR and was therefore justified on economic grounds. The analysis did not include all potential economic benefits for example: environmental benefits; other direct and indirect benefits of rural roads.
- The ex ante economic analysis was based on estimating farm and enterprise-level incremental benefits arising from the project. Financial budgets for representative crop, livestock, and agro-enterprises were prepared, converted to economic budgets (valued at economic prices), and aggregated on the basis of the AGP outreach assumptions.
- The financial analysis examined the financial viability of the main farm and value-chain enterprises that would be supported by the project and assessed their potential for increased profitability and income as a result of project interventions. The analysis compared two scenarios: “future without project” and “future with project”. The ex ante analysis did not include an overall financial rate of return.
- A sensitivity analysis showed that project viability was robust to adverse changes in project costs, and the project would still remain viable with increases in capital and recurrent costs of up to 72%. The analysis also showed that a delay in project benefits by two years reduces the ERR to 14.7%; and the project would become uneconomic, if incremental benefits were reduced by 42%.

ex post

- The estimated overall economic rate of return (ERR) of the project was 24% and the net present value was US\$156 million, which is the net worth of the project when all costs are accounted for, including family labor, and the benefits that the resources committed to the project would have generated without the project. The overall financial rate of return for the project was 26%.
- The ex post financial and economic analysis adopted the methodologies and assumptions similar to those used at appraisal. The main assumptions were: 20 year benefit period, financial project costs were converted to economic costs using appropriate conversion factors, which excluded taxes, duties, and price contingencies.
- A sensitivity analysis showed that the project would remain viable with increases in capital and recurrent costs of up to 73%. The analysis also showed that a delay of project benefits by two years would reduce the ERR to 18%, while the project would become uneconomical when incremental benefits were reduced by 44%.
- The ex post financial and economic analysis included reasonable assumptions and seem robust enough to assess the project's efficiency. However, the analysis did not shed light on the cost of the micro-irrigation. Also, excluding the 2016 crop year (drought year) might have provided a better assessment of the project's impact on productivity.

Administrative and Institutional Efficiency

The project closed 19 months later than expected. This was expected to delay benefits and according to the



sensitivity analysis a two year delay was expected to reduce the project's ERR to 18% - which is still above the opportunity cost of capital of 12%, but lower than the appraisal estimate at 19.9%. Implementation of the small scale irrigation works and infrastructure suffered from delays. These were the main cause for extending the closing date by 19 months. The implementing agency suffered from key capacity gaps in safeguards, procurement, financial management, and rural infrastructure (ICR, para 18, p. 11).

Efficiency is rated modest due to these weaknesses at the administrative and institutional level.

Efficiency Rating

Modest

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	✓	19.90	100.00 <input type="checkbox"/> Not Applicable
ICR Estimate	✓	24.00	100.00 <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. Efficacy of the first sub-objective was rated modest because the project achieved mixed results with regards to crop yields and failed to meet its outcome target on the increment in agricultural productivity. Also, women participation was lower than expected particularly for capacity building activities; and youth participation was poorly monitored. Efficacy of the second sub-objective was rated substantial because the project succeeded in improving market access and met its target on the percentage increase in the real value of marketed agricultural products (including livestock) per household. Overall Efficacy was rated Substantial. Efficiency was rated modest due to implementation delays *and* administrative weaknesses.

a. Outcome Rating

Moderately Satisfactory

7. Risk to Development Outcome



- **Institutional risk.** The Common Interest Groups (CIGs) and Water User Associations (WUA) need to be functional and sustainable. Both are expected to benefit from the second phase of the project which would help ensure the sustainability of the first phase's outcomes. The second phase would also ensure sustainability of irrigation infrastructure through strengthening WUA and would help link CIGs to markets.
- **Exogenous shocks.** Exogenous shocks and climate variability could reduce return on investments and limit participation by poor, risk-averse households. To address this risk, the project promoted sustainable land management practices and supported small-scale infrastructure, and facilitated market access. These activities were expected to reduce risk and increase participation. Increased incomes, from higher yields and better marketing, would enable beneficiaries to build assets, which in turn will reduce vulnerability to shocks and enable them to take advantage of investment opportunities. Despite these efforts, the drought experienced in 2016 still had a negative impact on crop yields.
- **Political.** In 2016, project areas saw wide spread demonstrations. Political unrest could result in insecurity and pose a risk to project development outcomes – including those of the second phase.
- **Operation-specific risk.** The AGP support fund excluded financing agro-chemicals. This contributed to significant losses to farmers from pests and disease, which was exacerbated by the lack of disease- and pest-tolerant varieties (ICR, p. 37). If this situation continues, farmers might incur heavy losses due to pest and disease infestations. This would undermine the sustainability of the development outcome.
- **Lack of access to agricultural credit.** Financial institutions view the agricultural sector as too risky. Agriculture loans account only 9.6% of the total loan portfolio of commercial banks (ICR, p. 29, para 69). Without access to credit, farmers might struggle to finance their farming operations or cut on needed inputs such as fertilizers and high quality seeds. This could result in depressed crop yields and would undermine the sustainability of the development outcome.
- Overall, the risk to development outcome is considered to be modest given the follow on project AGP2.

8. Assessment of Bank Performance

a. Quality-at-Entry

- The project provided a basis for a strengthened and more harmonized support by the World Bank and other DPs to agricultural growth in Ethiopia.
- The project was financed through a Specific Investment Loan (SIL) over five years. It was expected that over the long term the AGP would expand to other high-potential areas, with support through follow-on operations by a consortium of DPs.
- The Bank consistently engaged with the borrower and stakeholders during project preparation and appraisal. Design benefitted from analytical work by the World Bank, the International Food Policy Research Institute (IFPRI), Food and Agriculture Organization (FAO), among other developing partners as well as by various government agencies.



- Design also reflected lessons from other projects implemented in the country including: supporting private–public partnerships that can connect smallholders with agricultural markets, supporting a competitive process to fund participation by the full range of stakeholders in research and development; and enhancing the capacity of service providers to better link research to farmers.
- Design was complex, and included a broad range of activities and many implementation partners. It covered 96 woredas and 2,423 kebeles. Design complexity combined with broad geographical coverage posed a challenge for project coordination especially at the beginning of implementation. In addition, capacity-building attempts at the start of the project were not enough since implementing agencies continued to be weak. This impacted implementation of activities and resulted in the extension of the closing date by 19 months.
- Aspects of procurement, financial management, safeguard compliance issues, and technical aspects of financial and economic analyses were covered in detail at appraisal; and seemed adequate.
- Nine risks were identified at appraisal. Six risks were rated high and three were rated substantial. While the risk analysis in the PAD reflected relevant mitigation measures, there were weaknesses in the implementation and M&E capacity.
- M&E suffered from design and implementation weaknesses (see section 9 for more details).

Quality-at-Entry Rating

Moderately Satisfactory

b. Quality of supervision

The Bank's task team conducted regular implementation support missions and consistently responded to the needs of the borrower. Supervision benefited from continuity in the project task team leadership with only two task team leaders (TTLs) throughout the project's life. Supervision missions and technical committee meetings both provided technical support; and a team of local and international staff and consultants conveyed advice to the borrower. The task team was proactive and promptly followed up with the client on problems and the status of action plans. The Bank was responsive to changes in local conditions when the project faced implementation delays related to the construction sub-projects, due to civil disturbances and heavy, unseasonal rains throughout the country from March to May 2016. This prompted the project team to initiate a level 2 restructuring to extend the closing date to accommodate the implementation delays.

M&E could have benefited from more attention from the project team. The ICR (ICR, p. 31, para 75) noted that the budget allocated for data collection was not enough; and conclude that "the project was output oriented, and did not properly assess and document the project outcomes." Supervision should have addressed weaknesses in safeguard compliance (see section 10 for more details). Finally, Bank supervision should have addressed quality issues and ensured proper enforcement of technical specifications for the Small-Scale Irrigation schemes and warehouses.

Quality of Supervision Rating

Satisfactory

Overall Bank Performance Rating



Moderately Satisfactory

9. M&E Design, Implementation, & Utilization

a. M&E Design

M&E took place at four levels: federal, regional, woreda, and kebele/sub-kebele. Overall M&E was coordinated at the federal level (AGP-PCU at the Ministry of Agriculture) by a Monitoring and Evaluation Officer in collaboration with M&E Officers based at the regional AGP offices. M&E design was complex and coordination was challenging

The PDO was assessed by two outcome indicators. These were adequate and measurable to assess the project's impact on productivity and commercialization. However, there was no specific outcome indicator to assess the increased participation of women and youth. M&E started with a preliminary baseline data that was obtained from a Rapid Baseline Survey with limited geographical scope and sample size. This was later updated during the first year of implementation by a full baseline sample survey that resulted in different baseline values, requiring an amendment in the results framework.

The original Results Framework included 12 intermediate outcome indicators to assess the different activities under the project components. All the intermediate outcome indicators were designed to reflect disaggregated data (total households, female headed households and youth headed households).

b. M&E Implementation

Implementation suffered from a weak start, capacity challenges, coordination difficulties, and data limitations. Capacity at the local level was weak which contributed to delays in implementation of M&E activities. In addition, there was poor coordination among the multiple agencies required to report on the different indicators. This resulted in reporting inconsistent figures. Collecting youth-related data was particularly weak compared to women related data. According to the ICR (p. 13, para 20), the Project Implementation Unit (PIU) found it challenging to identify youth headed households. Data limitations were evident with the livestock yield index where only data on milk production was collected and no data was reported on other activities that were implemented under the project including: livestock fattening, meat production and beekeeping activities. A household survey covering 7,927 households was conducted. It used household and community-level questionnaires, and most of the indicators related to the results framework were collected. Revised indicators. The first outcome indicator agricultural yield target for youth-headed households was lowered. Intermediate outcome indicator 1.3: the target for the number of beneficiaries with innovative best practices was lowered from 126,000 to 60,000; Intermediate outcome indicator 1.4: the target for the number of sub-projects fully operational and sustainably managed 1 year after the initial project launch was lowered from 50,000 to 7,000; and Intermediate outcome indicator 2.1: the targets for the number of farmers benefitting from irrigation investments was reduced from 72,000 to 42,000. The ICR (Annex 11) provided acceptable justifications for these revisions where most of them were based on recommendations by the Mid-Term Review that better reflected realities on the ground. These revisions were carried out through a level 2 restructuring on September 3, 2015.

New indicators. A requirement for accessing the Global Agriculture and Food Security Program (GAFSP) funds, approved on December 28, 2011, as additional financing, was the inclusion of 13 output level core



indicators. These were not formally added to the results framework, yet the project attempted to report on them.

c. M&E Utilization

There is evidence that the assessments conducted during implementation informed decision making. A CIG assessment found that two-thirds of the CIGs created were not functional. This finding prompted project management to focus more on strengthening existing CIG rather than creating more. Results from an impact evaluation of the project conducted by the Ethiopia Development Research Institute (EDRI) were used in the ICR.

Overall, M&E design was complex, implementation was mixed, and utilization was mainly through assessments rather than direct project M&E. Therefore, M&E is rated modest.

M&E Quality Rating

Modest

10. Other Issues

a. Safeguards

The project was an Environmental Category B. It triggered the following six safeguard policies: Environmental Assessment (OP 4.01), Pest Management (OP 4.09), Involuntary Resettlement (OP/BP 4.12), Safety of Dams (OP/BP 4.37), Projects on International Waterways (OP/BP 7.50); and Physical Cultural Resources (OP/BP 4.11). Environmental risks and negative social impacts were likely to be minimal, manageable, and, in most cases, reversible. Overall, the project was expected to positively impact the environment, as investments would be planned through a participatory watershed development approach and include various water and soil conservation measures. The borrower prepared and disclosed an Environmental and Social Management Framework (ESMF) and a resettlement policy framework. According to the ICR (p. 14, para 23) there was no resettlement and "land acquisition was minimal, and in all cases, land was donated and compensation was paid as required." The project was the first agriculture project in Ethiopia to have a dedicated safeguard specialist.

The ICR did not include an explicit statement of compliance for any of the six triggered safeguard policies. **Environmental Safeguards.** Monitoring environmental safeguards suffered from procedural and documentation gaps during project implementation. This was evident with Integrated Pest Management Plans (IPMPs) where in some cases, they were not prepared before the sub-projects were implemented. As a result there was insufficient information as to whether the project promoted environmentally sustainable pesticide use in the command area of newly constructed and rehabilitated Small-Scale Irrigation schemes (ICR, p. 14, para 24).

Social Safeguards. There was poor documentation of land donation where consent regarding voluntary land acquisition was only taken orally without minutes of consultations and signatures of project affected



people. This raised concerns as to whether the project followed due process in land acquisitions. While a social audit report found no evidence of involuntary displacement or resettlement in the project areas, there was no Grievance Redress Mechanism system established to address concerns and complaints.

b. Fiduciary Compliance

Financial Management. Financial management benefitted from the adoption of sound financial management procedures, the use of a computerized accounting system, and hiring of qualified staff trained in Bank FM procedures. Audit reports were consistently submitted to the Bank in a timely manner. Annual project audit reports were unqualified throughout the project’s life. According to the ICR (P. 15, para 29) " the budget was fully utilized, with no outstanding advances at the end of the project."

Procurement. Procurement benefitted from training, supervision support and corrective actions during project implementation. However, procurement capacity was initially weak. There was high staff turnover, few issues of non-compliance including: weak recordkeeping and procurement of items without approval of procurement plans. The ICR did not report any incidence of misprocurement.

c. Unintended impacts (Positive or Negative)

Positive. The project contributed positively to the nutritional diversity of farm households.

Negative. The expansion in the use of micro-irrigation raises an unanticipated environmental concern as it relies on the use of water pumps, and pumping shallow water wells and community ponds. There is a concern whether micro-level irrigation technologies are being adopted and used in an environmentally sustainable manner, particularly given the lack of a legal framework and guidelines regarding the extraction of groundwater. Excessive unregulated extraction of ground water could result in dropping the ground water level or in extreme cases complete depletion of wells especially if annual abstraction exceeds annual recharge.

d. Other

11. Ratings

Ratings	ICR	IEG	Reason for Disagreements/Comment
Outcome	Moderately Satisfactory	Moderately Satisfactory	---



Bank Performance	Moderately Satisfactory	Moderately Satisfactory	---
Quality of M&E	Modest	Modest	---
Quality of ICR		Substantial	---

12. Lessons

The ICR included six Lessons. The following four Lessons are emphasized with some adaptation of language:

- **Exchange visits can serve as an effective mechanism to convince policy-makers to consider new initiatives that have worked in other places with a similar context.** The Livestock Market Development sub-projects demonstrated that public-private partnership (PPP) models can be successful in Ethiopia. After study tours to Djibouti and Somalia, the sub-project successfully piloted PPPs for quarantine stations, which are government owned and run by the private sector on a profitability basis.
- **To ensure the success of capacity-building activities, a systematic, consistent, and uniform approach is needed.** Many ad hoc training programs were conducted under the project, but the quality of the training was questionable and was not assessed. The project did not take a systematic approach to building capacity. With this lesson in mind, a capacity development support facility was established under the AGP2. It is providing technical assistance using a consistent, uniform approach to capacity building.
- **Against a small holder agricultural setting, building entrepreneurial capacity of farmer groups and cooperatives is critical to achieving agricultural commercialization.** The project experience demonstrated that farmer groups and cooperatives are needed to enable aggregation in a smallholder agricultural setting. The establishment of groups must be accompanied by attention to building their entrepreneurial capacity. Without it, there will be limits to the extent and speed at which agricultural commercialization in Ethiopia’s smallholder system —and agriculture at large — can be achieved. The functioning and performance of agricultural cooperatives needs to be evaluated to improve their potential in helping farmers and other value chain actors participate in markets.
- **Creating and strengthening Community Investment Groups (CIGs) is an effective way to mainstream gender into projects.** The project experience demonstrated that the establishment of CIGs increased the participation of women and youth in the project. It also allowed the project to focus on constraints that women and youth face by strengthening the specialized women and youth CIGs. Targeting youth in the creation and strengthening of CIGs proved effective in increasing youth participation in the agricultural sector. The project helped youth to achieve higher agricultural productivity and incomes. However, more analytical work is needed to identify youth-headed households and disaggregate data.

13. Assessment Recommended?

No



14. Comments on Quality of ICR

The ICR provided good coverage of project activities, but lacked details in some cases. For example, it was not clear in the ICR how the project supported agricultural extension-the ICR (p. 24) referred table 6 in annex 2, however, this table was not available. Also, it was not clear what soil and water conservation-related activities were supported by the project. Discussion of outcomes was logical and relied on the project achievements. However, no explicit ratings were assigned to any of the three sub-objectives. Also, it would have been helpful to the reader if the ICR mentioned the original/revised targets when discussing project outcomes, rather than just stating that the project was below or exceeded its target. The ICR rating on efficiency seemed generous given the 19 months delay experienced by the project. Finally, the ICR did not provide an explicit compliance statement for the triggered Safeguard Policies and did not report on the actual amounts disbursed for borrower financing or from parallel financiers.

a. Quality of ICR Rating Substantial