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| Original Commitment | 70,100,895.00 | 70,100,895.00 |
| Revised Commitment  | 65,374,615.07 | 65,374,615.07 |
| Actual              | 65,374,615.07 | 65,374,615.07 |

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2. Project Objectives and Components

a. Objectives

This project to support the Association for Strengthening Agricultural Research in Eastern and Central Africa (ASARECA) was the second operation financed by the ASARECA multi-donor trust fund administered by the Bank providing an umbrella framework to support an agricultural research Operational Plan in 10 countries. The Plan was implemented through two successive 5-year medium term projects—Operational Plan I (OP-I (2008 – 2013)); and OP-II (2014 – 2018). OP-I was completed on December 31, 2013, and an IEG Implementation Completion and Results Review (ICRR) was issued on December 30, 2014. This review
starts by assessing the ICR for OP-II only, but concludes by assessing the whole ASARECA program of the two operational plans together.

The Objectives at approval of OP-I (September 19, 2008) were:

Enhance regional collective action in agricultural research for development, agricultural extension programs and agricultural training and education to promote economic growth, reduce poverty, eradicate hunger and enhance sustainable use of resources in the regional agricultural systems of Eastern and Central Africa through support to the activities of ASARECA. (Association for Strengthening Agricultural Research in Eastern and Central Africa).

Source: Grant Agreement, November 3, 2008.

The Objectives of OP-II were:

Enhance access and utilization of agricultural research technologies and innovations in the regional agricultural systems of Eastern and Central Africa.

Source: Project Paper on Proposed Additional Financing (December 9, 2013)

For the purposes of this review (in particular for section 4), the extent to which the objectives for OP-II are achieved will be assessed by parsing the PDO into two distinct objectives as was done in the ICR, namely:

Objective 1. To enhance access to agricultural research technologies and innovations in the regional agricultural production systems.

Objective 2: to enhance utilization of agricultural research technologies and innovations in the regional agricultural production systems.

b. Were the project objectives/key associated outcome targets revised during implementation?
   No

c. Will a split evaluation be undertaken?
   Yes

d. Components
   The following four components making up OP-II were supported by Additional Financing (AF) for the ASARECA Multi-Donor Trust Fund approved by the World Bank (as shown below) which did not include anticipated contributions at appraisal from bilateral donors:

   Component 1: Support to Research for Development (Additional Financing US$16.25 million. Annex 3 in the ICR states that actual costs are not available for OP-II but it is known that they were significantly lower than estimated at appraisal). This component financed the
following:

i. Support for research activities and dissemination, policy analysis, capacity building for National Agricultural Research Systems (NARS), agricultural extension and education; and issuance of sub-grants for applied research and innovations through Technologies, Innovations and Management Practices (TIMPs).

ii. Support to research programs including planning, priority setting, management of sub-regional projects implemented by NARS grants, management, partnerships, capacity building and M&E.

iii. Support to the reform process including in research, extension and education.

Component 2: Support to ASARECA’s Knowledge and Information Hub. (Additional Financing US$2.07 million; Annex 3 in the ICR states that actual costs are not available for OP-II, but it is known that actual costs were significantly lower than estimated at appraisal)

This component financed the establishment of ASARECA’s Knowledge and Information Hub for enhancing access to and utilization of agricultural knowledge and information within and beyond ASARECA’s borders.

Component 3: Support to ASARECA’s Governance Structures. (Additional Financing US$1.75 million; Annex 3 in the ICR states that actual costs are not available for OP-II, but it is known that actual costs were significantly lower than estimated at appraisal)

This component financed support to ASARECA’s Governance Structures through strengthening its overall governance and oversight structures to enhance ASARECA’s capacity to fulfill its mandate.

Component 4: Support to ASARECA’s Management and Administration Structures. (Additional Financing US$8.38 million. Annex 3 in the ICR states that actual costs are not available for OP-II but it is known that actual costs were significantly lower than estimated at appraisal)

This component financed support to ASARECA’ s management and administrative structures through strengthening the Secretariat, including in financial management and procurement, M&E, Information and communication capabilities and infrastructural improvements of the headquarters.

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

Project Costs

Total estimated cost proposed in the Additional Financing paper was US$ 30 million, but actual costs are provided only for OP-I and OP-II together, although it is known that OP-II’s costs were much lower than the appraisal estimate. The primary reason was because disbursements for OP-II were suspended for two
years (and for the rest of the project period for the project's sub-grants program, the largest project component) following the discovery of mis-procurement which occurred eight months after OP-II was approved (section 10 b).

Project Financing

OP-I was supported by four donors: the European Commission, Canadian International Development Agency, the Department for International Development (UK), and later USAID. The Bank approved US$30 million as Additional Financing (AF) to the ASARECA grant. The approved AF financing to OP-II added up to US$28.45 million. The balance of the US$30 million was allocated to World Bank project management, administration and supervision costs (Additional Financing Project Paper, Table 2). The European Commission and USAID pledged to support OP-II in December 2013 but total additional contributions were only US$10.9 million. Ultimately the project used only part (22%) of the AF, primarily because the AF pledges had not fully materialized and disbursements were suspended for two years following the mis-procurement crisis (mentioned above and discussed in section 10b).

Borrower Contribution.

All contributions to the ASARECA Trust Fund were grants. None of the 11 countries whose National Agricultural Research Systems (NARS) benefited from ASARECA assistance contributed to the funding of ASARECA.

Key Dates

The US$30 million Additional Financing Grant for OP-II was approved by the World Bank in December 2013. The original closing date of December 31, 2013 for OP-I was extended to December 31, 2018 to allow for the completion of OP-II which was not changed. The other key dates were the discovery of mis-procurement in September 2014, the subsequent Fiduciary Review by the World Bank initiated in December 2014, and the suspension of Trust Fund disbursements from that time until February 2017.

Implementing Agency

ASARECA, a cross-country non-profit entity, was the implementing agency, providing technical support and a channel for the allocation of trust funds. The following 11 countries participated in the project: Burundi, Eritrea, Ethiopia, Kenya, Madagascar, Rwanda, Sudan, Tanzania, Uganda and joined later by South Sudan and the Republic of Congo.

Restructuring.

As noted in the Project Paper for the Additional Financing, the PDO for OP-II was modified making it simpler than the the PDO for OP-I by focusing only on "access to and utilization of agricultural research technologies and innovations". Also, a new component was added in OP-II to "facilitate and further develop ASARECA's new strategic role and function as a knowledge and information hub for the East and Central Africa region" (AF Project Paper, page ix). As noted already in Section 2a, this ICR review will assess the
outcome of OP-II, and will conclude with an assessment of the overall outcome of the ASERACA program, namely the combination of OP-I and OP-II, using the standard “split evaluation” methodology in Section 6.

### 3. Relevance of Objectives

**Rationale**

OP-II responded to a core need in Eastern and Central Africa – the generally low productivity of the agricultural sector and the widespread consequences that this had on the economies and social welfare of the countries in this region. The ten countries participating in OP-II were predominantly characterized by low agricultural productivity, low rural incomes and food insecurity. These were critical problems given that the majority of the countries’ people were living in rural areas, and over 60 percent of the rural population was employed in agriculture but agriculture contributed only about 30 percent of GDP. The negative implications for income distribution were clear.

Low agricultural productivity was at the heart of these problems. Technological improvements - such as genetically more productive seeds and livestock, improved agronomic practices, land husbandry, water management, productivity enhancing mechanization, processing, and marketing - were key as limited land area and water were typical constraints in most eastern and central African countries. The scope for improved productivity through technological improvements was considerable. Agricultural research and field demonstrations indicated that under optimal conditions yields could more than double.

The essential need to increase agricultural productivity was well recognized in Bank and African country strategy documents. ASARECA was charged with catalyzing, promoting and coordinating a harmonized approach to the agricultural research programs of individual country efforts. This was primarily through developing inter-linkages with the national agricultural research institutes of each country, creating wider access to new technologies and transfer of innovations between countries. Regional documents, anchoring enhancement of agricultural productivity included the Comprehensive African Agricultural Development Program and the Science Agenda for Agriculture in Africa.

The project’s role supporting the region’s strategy for increasing agricultural productivity was relevant to the challenges facing the countries associated with ASARECA to increase GDP growth. A ten-year Strategic Plan was established for the 2008 to 2018 period, to be financed through two successive operations: the Operational Plan I (OP-I) for 2008 to 2013, and the Operational Plan II (OP-II) for 2014 to 2018.

There are evident causative linkages between the project’s objectives and components. A combination of institutional research, grants for research and innovations, support to national research centers, an information hub, policy reforms, and extension and strengthening of ASARECA, could potentially generate and disseminate the knowledge and improved agricultural technologies that were needed (logical framework results chain at ICR page 9). Thus, the project’s objectives were well supported by the planned project activities, and were aligned to the overall goal to increase agricultural productivity. Moreover, OP-II’s objectives were more concise, and more focused on productivity than the overly broad and general objectives for OP-I.

The Relevance of the objectives for OP-II is rated Substantial.
Rating
Substantial

4. Achievement of Objectives (Efficacy)

OBJECTIVE 1

Objective

Enhancing access to agricultural research, technologies and innovation in the regional agricultural production systems.

Rationale

Theory of Change

To enhance access to agricultural technologies and innovations, the project supported a group of actions in the areas of research, innovations and technologies, that could enhance farmers' access to higher performing farm practices. Thus, the combination of applied research (the TIMPs program) and agricultural extension formed a practical means of boosting access to improved technologies and innovations to increase agricultural productivity and, as designed, a likely effective connection between the project-funded actions and the achievement of Objective 1.

Outputs

OP-II was generally effective in its core actions to enhance access to agricultural research technologies and innovations. The main source of research and innovation was through the competitive grants provided for the TIMPs (Technologies, Innovations and Management Practices) sub-projects. 489 TIMPs were generated (18 percent above the original target of 414 TIMPs). Other achievements included: direct contracting of research to agricultural research centers in the participating countries; the creation of two business support centers (the target was seven centers); and the construction of markets for stakeholders (farmers, agribusinesses, retailers and others).

However, ASARECA's own capabilities diminished markedly during implementation of OP-II. As mentioned in the ICR (para 68) "due to the financing cuts, ASARECA's capacity was significantly diminished by staff cuts." Radical cutbacks in funding during the suspension period left only a skeleton complement of 14 staff. Further, these were mainly mid-level to junior positions, with hardly any high-level technical specialists. This contrasted with the development of quality staffing and the institutional strengthening of ASARECA under OP-I (ICR paras 30 and 31), which had left a heritage of a competent staff complement IEG was advised by the Bank Task Team that ASARECA’s decline was a critical concern given its role as a research support organization meant to develop new technologies and provide state-of-the-art advice to specialists in other countries.
Outcomes

Improving productivity was, appropriately, the fundamental objective and core measurable PDO indicator for evaluating the outcome of Objective 1. The ICR stated that agricultural productivity (in terms of tons of crop produced per ha) increased in ASARECA countries by 4.7 percent between 2013 and 2017 (Table 4 and page 35 of Annex A). This estimate was only just short of the target of 5.0 percent (1% per year) for the project's implementation period from 2013 to 2018. According to advice to IEG from the Bank task team for this project, this estimate was based on a survey of productivity increases using a "rapid survey" technique on a sample of 120 farms for sorghum (in Eritrea) and wheat (in Burundi and Rwanda) production between 2013 and 2015. Clearly, the estimate of productivity growth was based on a small proportion of the crops grown in the ASARECA countries, over a very short period of time, and under circumstances that were not described. Thus, the estimated productivity increase attributed to ASARECA II must be considered an indicative finding subject to potentially significant error. The increase is, nevertheless, plausible as international experience has found that such a growth rate attributable to agricultural research is feasible.

As noted, an unresolved question is whether the growth in productivity is partly attributable to factors other than research such as greater availability of fertilizer. General economic growth would have stimulated demand for agricultural products, and any improvements in markets or road infrastructure would also have contributed to higher prospective producer profits and hence a boost in production. Additionally, it is not clear from the ICR whether the OP-II surveys included use of "controls," (i.e.measuring changes in productivity in areas without TIMPs). On the other hand, an opposite influence might be that the measure of productivity is quantity-based without including benefits from diversification to higher-value crops or marketing chains. There are, thus, a number of unanswered measurement questions regarding the assessment of productivity growth for this project which are not addressed in the ICR.

An indicative indirect proxy for an increase in agricultural productivity is the degree of stakeholder satisfaction with ASARECA’s knowledge and information services. According to the ICR, a survey found that 61 percent of stakeholders in the project were “satisfied” with the quality of the ASARECA knowledge and information services (the target was 71 percent). A similar satisfaction level was found for the knowledge Hub (reviewed under objective 2). Taking account of the estimated productivity gains and the positive views of stakeholders, the Efficacy of the achievements toward Objective 1 is rated Substantial.

Rating
Substantial

OBJECTIVE 2
Objective
Enhancing the utilization of agricultural research and technologies

Rationale
Theory of Change

The means by which utilization of agricultural research, technologies and innovations were to be enhanced was primarily through expansion of the TIMPs program, and the development of a "knowledge Hub." If well
implemented, these actions could scale-up the transfer of improved agricultural technologies, the TIMPs providing direct field contact and the Knowledge and Information Hub a broader geographic audience. This was a reasonable cause and effect results chain for enhancing the utilization of agricultural research and technology.

**Outputs**

The two main actions contributing to Objective 2 were the TIMPS program and the Knowledge and Information Hub, and each has a corresponding measurable indicator for assessing the Objective:

**The TIMPs program.**

The achievements of the TIMPS compared with the expectations were low. The area under improved TIMPs (defined in the ICR as "the number of hectares under improved TIMPS") increased by 6,414 hectares, eight percent of the targeted increase (and the corresponding indicator) of 75,000 hectares (ICR Table 4). And the "percentage of stakeholders who have adopted selected TIMPs" was 3 percent of the original target of 89 percent (ICR, Table 4). Further, the adoption of TIMPs technologies was geographically concentrated - 83 percent of the area practicing TIMPs-based technologies being confined to four countries (Rwanda, Burundi, Kenya, and Uganda), (ICR, Table 3).

There were also a number of actions related to policies, procedures and regulations: harmonization of regulations for seed trading; developing regional policies for the dairy sector; cataloging crop varieties; setting regional cassava and potato standards for production and trading; developing a regional approach to biotechnology and biosafety; and developing policy options for a regional response to the food crisis.

**The Knowledge and Information Hub**

The Knowledge and Information Hub was created for outreach of technical knowledge to stakeholders and for exchange of ideas. Usage was high. There were 2.8 million "hits" (site visits), a significant achievement, even if slightly below the ambitious target of 3.0 million.

**Outcome**

The creation and operation of the Knowledge and Information Hub was well-appreciated. Its high usage indicates that stakeholders found the hub beneficial, and this can reasonably be assumed to have benefited utilization and the sophistication of the technologies adopted. The success of the Knowledge and Information Hub satisfies one of the two main indicators for Objective 2, namely "Beneficiary satisfaction with the quality of the ASARECA knowledge Hub products and services."
However, development of the core TIMPs program was the planned driving force to enhance the adoption of the new technologies, yet the area covered by the TIMPs was well below expectations. Hence, against the other measurable indicators for achievement of Objective 2 - "Number of hectares under improved TIMPs" - project achievements were low.

Taking account of the broadly successful impact of the Knowledge and Information Hub, but the very limited coverage of the important TIMPs program, the Efficacy of the achievement of Objective 2 was rated Modest.

OVERALL EFFICACY

Rationale
The suspension of disbursements created by the mis-procurement crisis was a major cause of the overall low achievement of the project. Nevertheless, for Objective I - enhancing access to agricultural research technologies and innovations - contributing actions requiring lower expenditures - such as developing a research program, expanding contacts with international research agencies, and creation of new technologies for access by stakeholders - were mostly achieved. Although there are some questions on reliability of data and attribution of cause and effect, agricultural productivity is reported to have increased by nearly 5 percent during the five year implementation period. The Efficacy of the achievement of Objective I was Substantial. For Objective 2 - to enhance utilization - while the Knowledge and Information Hub was successful, the major program under the TIMPs had achievements well short of expectations, and the Efficacy of Objective 2 was therefore rated Modest. Since the adoption of the technologies developed under ASARECA II was the predominant objective of this project, the Overall Efficacy of the achievement of OP-II is rated Modest.

Overall Efficacy Rating
Modest

Primary Reason
Low achievement

5. Efficiency

Economic Viability
An economic rate of return was not calculated in the ICR, although a quantified commentary is provided based on an impact evaluation prepared for OP-I. The ICR stated that "Using a Cost-Benefit approach, the impact evaluation found that the net difference in (annual) incomes between beneficiaries and non-beneficiaries was US$272" (para 46). The analysis of OP-I also estimated that incremental benefits of beneficiaries would exceed project operational costs within two years. At appraisal the Additional Financing document for OP-II included an annex prepared by ASARECA which provided numerous examples of remunerative advances in agricultural technologies in member countries for a wide range of crops (Annex 4), but no rates of return to the project's
investment were estimated. However, in retrospect, OP-II presents an altogether different picture to that envisaged in 2013. Although the ICR did not make any estimates of rates of return for OP-II, the suspension of the sub-grants program led to the low achievement in the benefits generated by TIMPs, which would inevitably translate into a low economic rates of return for the project.

Institutional Efficiency

In the time and budget available, some progress was made by most project components especially in software areas requiring relatively low expenditures (e.g. policy, governance, and research activities with low investment costs). But the low achievements of the TIMPs program limit OP-II’s implementation efficiency as a whole. Also, the capacity of ASARECA itself as an institution, was reduced, due to the staff reductions.

In summary, the suspension of the sub-grants program resulted in low economic and institutional efficiency. OP-II's economic viability would have been lower than OP-I given the much lower benefits from OP-II’s core program. Despite the fact that reviews of the literature on the impact of agricultural research have generally concluded that such research (particularly in Sub-Saharan Africa) generate high economic rates of return, OP-II’s Efficiency has patently been weak and it is therefore rated Modest.

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:

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

6. Outcome

Outcome of OP-II

The relevance of objectives for OP-II was Substantial. The project's achievements were, however, significantly held back by the fall-out from the mis-procurement crisis and subsequent suspension of disbursements. The efficacy of the project's first objective (to enhance access to improved technologies) was Substantial because the ICR reported that the number of technologies that were generated exceeded targets and, based on a survey of yields, crop production increased by an average close to 1% per year which almost achieved the target. For the second objective (an increase in the utilization of new technologies), although the Knowledge and
Information Hub performed well, utilization of the TIMPs on farms was far below the targeted area. Hence, the efficacy of the achievement of Objective 2 was rated Modest. Because the utilization of new technologies generated by the TIMPs and other activities was well below expectations the overall efficacy of the project's achievement was rated Modest. OP-II's efficiency was rated Modest because the low achievements of the TIMPs program severely reduced the prospective economic rate of return to the project's investment.

With a substantial relevance, modest efficacy and a modest efficiency, OP-II had significant shortcomings in its achievements and its Outcome is therefore rated Moderately Unsatisfactory.

Outcome of OP-I and OP-II Combined

OP-I had already been assessed in IEG's ICR Review dated December 30, 2014 using the same project number (P112600). The outcomes for both OP-I and OP-II were taken into account to assess the overall outcome for the whole ten year Operation Plan.

For OP-I, Outcome was rated Moderately Satisfactory because, while that project was mostly well implemented, its design was assessed as insufficiently focused on regional collective action.

The outcome of the whole ten year Operational Plan supported by OP-II in combination with its predecessor project, OP-I, is assessed using a split rating methodology taking account of the performance of each operation weighted by their relative shares of total disbursements for the 10 year program. Disbursements were US$58.9 million for OP-I and US$6.4 million for OP-II, the percentage share of each operation in overall disbursements (US$65.3 million) therefore was 90% and 10% respectively. OP-I's outcome was rated Moderately Satisfactory (score of 4), and the outcome for OP-II in this ICRR has been rated Moderately Unsatisfactory (score of 3). Multiplying these scores by their corresponding weights, OP-I's share is 3.6 (0.9 X 4) and OP II's share is 0.3 (0.1 X 3), which combined provides an overall weighted average score of score of 3.9 rounded to 4, which is equivalent to a rating of Moderately Satisfactory for the Outcome of the 10-year Operational Plan.

a. Outcome Rating
   Moderately Satisfactory

7. Risk to Development Outcome

The main risk to the project at effectiveness was that the availability of donor funds for the project had not been confirmed. This was compounded when the Bank suspended disbursements at the end of 2014, leaving little money to enable ASARECA to build managerial and technical capacity, to rebuild staff numbers and capability, and to gain experience through implementation activities to establish a strong base for future operations.

These concerns are to some extent mitigated by actions taken by ASARECA at the end of the project to strengthen it's governance and to make its development program more attractive to the donor community (ICR, Annex 5). Specifically, a new institutional structure and new Board of Directors were created, and financial management strengthened, and participating countries will take greater responsibility for their research and extension activities. Such improvements and any funds from donors would make ASARECA...
more financially secure. At the same time a long-term strategy for self-reliance using internally (funded by the users and participating countries) generated funds should be possible. This might be difficult for a research project, although new technologies with tangible long-term benefits would provide a rationale for financial support or investment from beneficiaries (e.g. farmers). Nevertheless, until the actions noted above are implemented, and a longer-term strategy is formally put in place, ASARECA’s Risk to Development Outcome is assessed as Substantial.

8. Assessment of Bank Performance

a. Quality-at-Entry

In institutional, administrative and technical features the project’s design were largely based on its predecessor, OP-I, which was sensible in view of the satisfactory experience gained under that first operation. On the other hand the objective for this project was more focused, and considerably better than the diverse objectives of OP-I.

Nevertheless, the unrealized assumption by the Bank task team regarding the funds available from donors for OP-II was a critical error requiring a major down-sizing of the project almost immediately after approval, even before the mis-procurement crisis. As aptly summarized in the ICR, "OP-II design was unrealistic given the fact there was no donor ready to support the project as designed" (para 64). The ICR also commented that "A weakness at entry was the commencement of OP-II implementation prior to confirming adequacy of funding for the life of the project" (para 90). OP-II had considerable shortcomings at entry and therefore this review rates quality at entry as Moderately Unsatisfactory.

Quality-at-Entry Rating
Moderately Unsatisfactory

b. Quality of supervision

The Bank was exemplary in its rapid response to the mis-procurement problem. The first stage forensic review was undertaken within weeks after the whistleblower’s allegations of mis-procurement, and the In-depth Fiduciary Review commenced in December 2014. The Bank was thorough in its investigations and was expeditious in suspending disbursements and in downsizing and revising the OP-II program. Procurement and financial staff resources applied to the task were typical, although the resources required for overseeing and training staff in 10 countries were formidable.

Practical steps were taken by the task team to parallel the suspension of disbursements with a revised operational program through adjustment of targets, and downsizing of components severely affected by the budget crunch. A more comprehensive option would have been a formal restructuring, focused on Objective 1, supporting a technical assistance project promoting research, policy making and limited demonstrations. Nevertheless, the responsiveness to the procurement crisis, and the practical actions taken thereafter, responded proactively to the issues that had to be confronted.
Despite the mis-procurement crisis the Bank found a way to maintain some degree of continuity of the dialogue with ASARECA throughout the suspension period. It is to the Task Team’s credit that when project funding was resumed a reduced ASARECA program was launched quickly. The ICR indicates a broad range of specialists in supervision missions (including procurement and financial management specialists) involved in the dialogue on re-launching some aspects of the ASARECA program.

This review has rated the quality of supervision as Satisfactory.

Overall Performance of the Bank

Design was unsatisfactory because the project began without assured agreements on financing by donors. Supervision performance was satisfactory. The Bank was quick to commence the fiduciary reviews, and to downsize the OP-II program, and the task team maintained a dialogue and a minimum action program throughout the suspension period. However, performance at the project design stage, pulls down the combined rating. Overall Bank performance is therefore rated Moderately Satisfactory.

Quality of Supervision Rating
Satisfactory

Overall Bank Performance Rating
Moderately Satisfactory

9. M&E Design, Implementation, & Utilization

a. M&E Design
OP-II inherited a well-functioning M&E system from OP-I, with an effective management organized at ASARECA and country levels, and with ongoing monitoring activities. Adjustments were made to update monitoring to OP-II needs, including for the results indicators. Some indicators in the ICR were inadequately defined making their interpretation difficult and the ICR often does not indicate the sources of key data, or their reliability. For example, the meaning, veracity and sources of data on the "percentage change in agricultural production and productivity" in Table 4 of the ICR were very vague.

b. M&E Implementation
M&E activities were reduced in the first year of the project due to the financial stringencies resulting from the reduction of donor funding. ASARECA continued to prepare biannual progress reports, but even this reporting stopped when the fiduciary review commenced and disbursements against the sub-grants were suspended. Nevertheless, some progress was made towards developing a performance-based monitoring system, including migration from Microsoft Office Spreadsheets to a more robust system to aid planning, reporting on budgets, learning, and evaluation.
When the suspension of disbursements ended in February, 2017, ASARECA moved from a transitional results framework during suspension to a supplementary results framework which was developed in response to the results of the In-Depth Fiduciary Review. Although this framework was not endorsed by Bank management it provided ASARECA with a road map with measurable targets as it sought to develop a program to reform its governance and institutions (ICR, paras 77 and 79).

c. M&E Utilization
Except in the first 1½ years of the project and its last year, M&E was severely curtailed, significantly limiting the availability of data and its usage.

Overall Assessment.

The budget crisis following the mis-procurement and the suspension of disbursements did not enable the M&E program to function as intended. The overall quality of M&E is rated Modest by this review.

M&E Quality Rating
Modest

10. Other Issues

a. Safeguards

OP-II was a category B project and triggered three safeguard policies: Environmental Assessment (OP/BP 4.01), Pest Management (OP 4.09), and Forests (OP/4.36). At appraisal, the range of coverage or partial coverage was more extensive than this, as determined by the Environmental Management Framework which, in addition to guidance on implementation of the three safeguards, also provided an extensive “negative list” of sub-projects not to be financed, among them: protected areas, logging or other forest degradation, damage to physical cultural property, involuntary resettlement, dams more than 10 meters in height, indigenous people’s rights, and sub-projects with certain types of natural habitats. Screening for consistency with the environmental framework was done at sub-project approval.

Implementation of these appraisal arrangements was difficult due to a shortage of staff following the suspension of disbursements. The ICR advised that the environmental program was to be coordinated by an environmental specialist in ASARECA who was hired in 2013 (just before the first year of OP-II ended), but then released in 2014 because of the suspension of disbursements, and from 2015 was re- hired on an ad hoc basis for specific tasks. From 2014, the environmental program was coordinated by a natural resources program assistant without environmental qualifications. The environmental specialists in each of the OP-II countries provided expertise at the national levels, but the absence for much of the project period of a highly qualified specialist at ASARECA’s level made coordination difficult and transfer of knowledge regarding quality environmental practices was below potential. This is reflected in the lower than intended
compliance with environmental and social safeguards of sub-projects - 75 percent of the projects compared with the targeted compliance of 90 percent.

Social Safeguards

The screening process for social issues was part of the environmental screening. The ICR advised that no social issues were identified during OP-II’s preparation, nor during implementation.

b. Fiduciary Compliance
Financial Management

Financial reporting and auditing started in timely fashion but failed to identify the project’s procurement issues. As part of the Fiduciary Action Plan agreed after the Fiduciary Review (see procurement sub-section below), ASARECA agreed to strengthen key financial management staff, update the financial aspects of the Operations Manual, and upgrade the accounting system. The ICR comments that the last Bank mission found some progress in implementing these improvements.

Procurement

As noted already, widespread mis-procurement was identified in September 2014 during the first year of the project. This was first noted by a “whistleblower” in September, 2014, who informed the Bank and Government of irregularities in procurement procedures in ASARECA and in the participating countries. The Bank undertook an initial Forensic Review in the following weeks, and then a detailed “In-depth Fiduciary Review” (IFR) commencing in December 2014 which was completed in February, 2017. The Review found evidence of mis-procurement, procurement non-compliance, and ineligible expenditures, which resulted in ASARECA refunding US$2.2 million to the ASARECA TF. Project disbursements were suspended after the IFR when financing of a minimum program to strengthen ASARECA and some core activities was approved by the Bank.

c. Unintended impacts (Positive or Negative) 
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d. Other 
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11. Ratings

<table>
<thead>
<tr>
<th>Ratings</th>
<th>ICR</th>
<th>IEG</th>
<th>Reason for Disagreements/Comment</th>
</tr>
</thead>
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<tr>
<td>Outcome</td>
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<tr>
<td>Bank Performance</td>
<td>Moderately Satisfactory</td>
<td>Moderately Satisfactory</td>
<td>Inadequate collection and verification of critical data on project performance.</td>
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<tr>
<td>Quality of M&amp;E</td>
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<td>Modest</td>
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<tr>
<td>Quality of ICR</td>
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### 12. Lessons

The ICR proposed 12 useful lessons from the project. Two presented below, with some modifications in language, were considered by IEG as the most important. The third lesson below is an additional lesson that IEG drew from the project.

1. **Regional projects require tailored and tight oversight of fiduciary and procurement activities.**

   The fiduciary crisis and suspension of disbursements in the first year of this project is illustrative of the consequences of mis-procurement, not only in the general unacceptability of such malfeasance, but also in its operational consequences - severe negative impacts on project implementation. Fiduciary oversight was particularly difficult with multiple countries involved. The typical checks and balances of a project in one country alone - such as auditing as standard practice, and oversight by the country's financial agencies - were not applied for the small country programs. Practical means to provide the necessary fiduciary and procurement guidance and monitoring is required, with variability by country to reflect different institutional structures. The first lesson is that for a regional project involving multiple countries, intensive training, special auditing arrangements, and other measures are necessary to avoid fiduciary mismanagement. The second lesson is that an appropriate level of funding for Bank staffing to provide oversight of procurement and financial management also needs to be considered.

2. **Design for the resources available, not the resources desired.**

   The Bank team planned for project financing assuming that donors would, as in the past with OP-I, provide significant additional funding to augment the Bank's US$30 million contribution. But donors did not contribute the funds expected. This caused a financing crisis and a major downsizing of the project, only months after project approval. The lesson is that no project should be declared effective until all funds required for the efficient implementation of the project have been confirmed.

3. **A full restructuring rather than an informal adjustment of a project's implementation plan is preferable when a project's implementation environment (particularly its funding) has significantly changed.**

   When disbursements for OP-II were suspended, this might have put into question the type of project needed in the new financing environment. Rather than formally restructure, the project was adjusted to finance the project's software aspects - in essence, a scaled-down OP-II without the TIMPs. However, with the core of the project effectively closed down, the type and scale of software activities, and many other features of the project needed change. The lesson is that a formal restructuring of the project, provides greater opportunity for considering revised objectives,
components, institutional arrangements and funding in order to complete implementation efficiently than ad hoc administrative adjustments.

### 13. Assessment Recommended?

No

### 14. Comments on Quality of ICR

The ICR is a thoughtful assessment which candidly discusses issues and shortfalls, including in areas where Bank and Government performances could have been improved. The discussion underpins the ICR’s reflective and forward looking lessons. The sections on background context, relevance, impact of the procurement crisis, and changes in ASARECA’s operations are well analyzed.

Several aspects of the ICR could, however, have been strengthened: (i) sources and information (e.g. survey design) to enable assessment of likely reliability of key data are seldom indicated, which was especially crucial for core indicators such as productivity; (ii) the subjects and effectiveness of the policy reforms were not stated; (iii) a brief commentary on the distinctly different performances by country would have provided lessons on implementation features determining success or otherwise; (iv) a brief overview of the make-up and functioning of typical TIMPs would help visualization of their role and effectiveness in advancing technological change; (v) discussion on actions possible to better assure ASARECA’s financial sustainability would have added a forward looking perspective for the institution's future development; and (vi) there are instances where there are inconsistencies in key data between the main report and the Results Framework which created difficulties for assessing some of the results. Overall, though, the report provides a clear account of the project's results, and the quality of the ICR is therefore rated Substantial.

**a. Quality of ICR Rating**

Substantial