



1. Project Data

Project ID P084792	Project Name IN: Assam Agric Competitiveness	
Country India	Practice Area(Lead) Agriculture	Additional Financing P129686
L/C/TF Number(s) IDA-40130,IDA-50620	Closing Date (Original) 31-Mar-2010	Total Project Cost (USD) 276,830,000.00
Bank Approval Date 14-Dec-2004	Closing Date (Actual) 15-Mar-2015	
	IBRD/IDA (USD)	Grants (USD)
Original Commitment	204,000,000.00	0.00
Revised Commitment	184,809,369.88	0.00
Actual	189,736,914.75	0.00

Sector(s)

Rural and Inter-Urban Roads and Highways(60%):General agriculture, fishing and forestry sector(11%):Irrigation and drainage(10%):Agricultural extension and research(10%):Agro-industry, marketing, and trade(9%)

Theme(s)

Rural services and infrastructure(29%):Rural markets(29%):Rural policies and institutions(28%):Other rural development(14%)

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2. Project Objectives and Components

a. Objectives

Financial Agreement Project Objective:

To increase the productivity and market access of targeted farmers and community groups



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

No

c. Components

(Includes Additional Financing activities)

The Assam Agricultural Competitiveness Project (AACP) had three components:

1. Investment Grant Scheme

(Estimated costs at appraisal (base costs without contingencies: \$98.4 million. Actual costs at project completion: \$114.4 million.)

The Investment Grants Scheme included irrigation development; farm mechanization; and fish production:

- Irrigation and drainage development promoted shallow tube-wells, low lift pumps and piloting of micro irrigation, desilting drains, and repairs of drains and culverts.
- Farm mechanization promoted investment in tractors and other agricultural machinery to facilitate timely planting and crop diversification.
- Fish production provided training, technical assistance and equipment to intensify production on farmer ponds, community tanks and oxbow lakes.

Financing shares for the Grant scheme were 50 percent Grant and 50 percent beneficiary (a change made during early project implementation from the 30 percent Grant envisaged at appraisal).

2. Agricultural Services and Market Chain Development

(Estimated costs at appraisal: \$43.6 million. Actual costs: \$35.4 million.)

Three main constraints were to be addressed: inadequate market-linked technology transfer; need to develop producer organizations with adequate access to markets; and low productivity; especially of livestock. Sub-components included: strengthening farmer advisory services; marketing extension; livestock upgrading; improving fish seed; developing milk marketing cooperatives; forestry; and a project coordination unit.

3. Infrastructure Development

(Estimated costs at appraisal: \$148.6 million. Actual costs: \$136.8 million.)

This was to improve: the rural road network and rural markets. The roads program included rehabilitating or upgrading of existing rural roads and bridges, including small market-access roads; and a roads maintenance program. The rural markets program was primarily to upgrade wholesale markets.

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

Project Costs and Financing:

AACP's total project costs (base costs plus physical and price contingencies) were estimated at appraisal to amount to \$214.3 million. Actual project costs, including costs under Additional Financing (AF), were \$286.6 million. IDA provided an initial Credit of \$154.0 million equivalent and an AF of \$50 million equivalent – a combined total of \$204 million. At completion, \$190.8 million had been utilized – 94 percent of the Credit and AF combined

Other financiers (including for the AF) were Government, which provided \$33.5 million (actual) and local communities (\$62.3 million, actual). For both Government and the local communities, their final contributions (including for the AF activities) exceeded appraisal plans – by three percent for Government and 15 percent for the communities.

Key Dates and Project Duration:

AACP was approved on December 14, 2004 with a planned closing date of March 31, 2010, some 5 ¼ years after approval. Actual closure was five years later – on March 15, 2015, making a total implementation period for the original Credit and the Additional Financing (AF) of 10 ¼ years. The extension of project closure was primarily due to the extra time required to implement the activities under the AF. Project Effectiveness was on February 24, 2005, only two months after the project's approval. The Mid-Term-Review was in February, 2008, as anticipated at appraisal. The AF was provided in the Restructuring of March, 2012 (refer below).

Restructurings:

There were five Level II Restructurings and one level I Restructuring.



The Level I Restructuring (March 14, 2012) was to provide the Additional Financing, revise the Results Framework, consolidate eight disbursement categories to two categories, and reduce disbursement reporting from statements of expenditures to a quarterly report-based disbursement system.

The Level II Restructurings were:

- 1 September 27, 2006. The matching grant provided to farmers for irrigation development was increased from 30 to 50 percent; and the requirement of mandatory borrowing by farmers from commercial banks to cover their part of the investment costs was removed.
- 2 December 9, 2009. Project closing date extended by 21 months.
- 3 September 20, 2011. Reallocation of Credit between expenditure categories to utilize the unallocated amount of SDR 10.5 million.
- 4 October 28, 2011. Project Closing Date extended by 3.5 months to enable completion of preparation for the Additional Financing.
- 5 December 19, 2013. Savings of \$10 million equivalent under Additional Financing was cancelled, due in part to savings from depreciation of the Rupee against the dollar.

3. Relevance of Objectives & Design

a. Relevance of Objectives

As well articulated in the ICR, enhanced agricultural yields and improved access to markets were central to the Assam State (and Government of India as a whole) and Bank strategies to increase farmer incomes and alleviate poverty. AACP was sharply focused on two objectives – increasing agricultural yields, and improving farmer access to markets. The objectives recognized two essential needs in Assam both from a growth and from a poverty alleviation perspective.

Assam is a low income state with a high incidence of poverty, and at appraisal agriculture was in moribund state. Between 1993/94 and 2001/02 agricultural GDP in Assam hardly changed, which compares with national agricultural growth averaging 2.9 percent per annum. Some 87 percent of the state's poor live in rural areas, making agricultural growth a key need for poverty alleviation as well as economic development.

A number of constraints hindered agricultural growth: lack of capital to invest in irrigation and farm mechanization; very limited markets for agricultural produce; low genetic quality and productivity of livestock and poorly performing livestock services; an unorganized and underdeveloped fisheries sector; lack of effective producer organizations to facilitate service delivery; a poor rural roads network; and very limited involvement of the private sector.

The project objectives were relevant to the economic and rural strategies of both the Bank and the National and Assam governments. The Bank's 2004 Country Assistance Strategy (the year when AACP was approved) recognized the need for higher agricultural growth and poverty alleviation. CAS perspectives included increasing investment in agricultural services, irrigation and rural roads; empowering local communities through farmer organizations; promoting private sector investment in the rural sector, and decentralization of governance. The CAS for 2005-2008, and the Country Partnership Strategy for 2009-2012 placed emphasis on rural growth. And most important, the 2013-2017 Country Partnership Strategy, encompassing the project's completion, and thus being the most significant strategy document for evaluation purposes, highlighted inclusive agricultural and rural growth through innovative investments in farms, rural roads and markets, and effective technology transfer for increased agricultural productivity; and improving the access of farmers to agricultural markets. These orientations encompassed much of what AACP set out to achieve.

The project objectives are also consistent with Government of Assam's rural development policies. In particular, the State's Agricultural Policy Paper (2004) sought to expand shallow tube-well irrigation, invest in farm mechanization, enhance agricultural research and extension services, increase private sector involvement in input supply, and improve market opportunities for agricultural production.

In summary, the project's objectives were consistent with the need to increase agricultural productivity and improve market access, and, to the extent possible, target benefits to the poor, and they were core elements of both the Bank's and Borrower's development strategies.

AACP's Relevance of Objectives was High.

Rating

High

b. Relevance of Design



The AACP’s design was well tailored to what was needed to be done and to a practical means to achieve the objectives. Further, it used the existing Government institutions (eight agencies were involved), operating within their intended mandates, thus harnessing available expertise and providing opportunity for institutional strengthening.

The Results Framework in the PAD and ICR is consistent with the project objectives, placing improved productivity and market access as the overall project objectives, and providing several measurable outcome indicators such as yields and market surplus. The associated indicators for intermediate outputs are a series of measures of project achievements by project activity. Together, these indicators measure intended and achieved project/component progress. The link with the project development objectives could have been more explicitly articulated, however, which would have assisted in prioritizing project actions, and monitoring impacts. Nevertheless, the project components and output indicators show an implicit link between actions, outputs and objectives. The Investment Grants scheme provided the capital and the technical assistance for farmers, fishers and community organizations to take on new activities or actions to increase productivity, one of the project’s two objectives. AACP’s second objective - to increase market access - which was supported by the project's second component, was focused primarily on developing capacity and opportunity for developing marketing chains and for upgrading agricultural and marketing advisory services. And two other key constraints to agricultural development – poor rural roads and marketing infrastructure were also tackled through the second component. For both objectives, design also included screening processes and other means to reach the poor, but the degree to which these were effective is not clear (refer section 4 of this ICRR).

Project design was complex in the number of institutions involved and the very diverse array of sub-sectors and field activities. According to the Task Team, this complexity was more than would have been desirable, but it was a natural result of a rural project dealing with *competitiveness* (as in the project’s name, the “Assam Agricultural Competitiveness Project”). Activities that had potential to be competitive, such as fisheries and livestock, fell naturally under the project despite their distinctly different technical and support service needs compared with cropping. Competitiveness also needed attention to the marketing chain as a whole, and not just to production. Thus, for the AACP, complexity might be considered as inherent to the nature of the project, and the detailed design for project activities and processes provided the guidance to make this workable.

The Additional Financing of \$50 million was primarily for scaling up existing activities, and did not change the original design. It was also, coupled with an extension of the project period, seen as providing additional time to consolidate and roll out state-wide the project’s innovative groundwater monitoring program, and to allow more time for policy reforms and strengthening institutions. These are all worthy objectives, but a request for Additional Financing was a risky approach given the status of the project at that time. Disbursement was about 80 percent of the Credit and the project closing date had already been extended by two years, not a propitious situation for requesting further funding, especially as the Additional Financing was relatively large – about one third of the original Credit – and assumed a yet larger investment program than the original targets. Nevertheless, in the event (refer section 4 of this ICR Review), the project met its physical targets and the extra time enabled the project to be scaled up and the groundwater monitoring program to be introduced state-wide. Thus, despite the challenges of adding a relatively large AF to a project that had been experiencing difficulties, the AF strengthened the project and enhanced its achievements.

A notable feature of project design is the degree to which constraints and opportunities to achieving the objectives were selected on a case-by-case basis for their impact value - amongst these, the specific reasons behind poor yields, and poor market opportunities, and the most effective specific actions to resolve these. In effect, the strength of project design was less that it had a comprehensively articulated strategy (although the broad features of a project strategy are contained in the Appraisal Report) than that it was a good choice of individual practical actions, developed by experienced practitioners, which, together with other actions, would make a difference. But this “*problem/opportunity/action*” approach enabled a project with a practical base for achievement. As stated in the ICR (page 24) “Identifying the most important constraints and addressing them through well-tested, simple, technical solutions proved to be the key factor....” (for success). In short, while challenging in its multi-action, multi-institutional character, the design was practical, targeted on the key actions needed, and was particularly well detailed, in such a way that the project had a good foundation for reaching its objectives.. AACP’s Relevance of Design was Substantial.

Rating
Substantial

4. Achievement of Objectives (Efficacy)

Objective 1

Objective

To increase productivity.



Rationale

AACP's efficacy will be assessed based on its two objectives: (i) increasing productivity; and (ii) increasing market access. (The degree to which the project was reaching "targeted farmers and community groups" will also be reviewed, as, while this was not a separate objective, it is a thrust common to both objectives)

INCREASING PRODUCTIVITY

Outputs (Physical achievements)

The project directly benefitted 566,000 persons, exceeding the targeted number of 410,000 persons by 38 percent. The main enabler for higher production was the investment grant program coupled with upgrading or introducing services such as agricultural extension, genetic improvement of livestock and fisheries, and enhancing the productivity of land through rehabilitation of irrigation systems. Efforts to increase productivity spanned an array of actions across a broad band of interventions, of which the following were the main activities and their achievements. Area irrigated with tube-wells reached 250,000 hectares, as against the appraisal target of 150,000 hectares. Area drained and put under cultivation was 31,700 hectares compared with the targeted 20,000 hectares. There were 27,000 farmers benefitting from farm mechanization (target 24,000). For dairy cooperatives 294 cooperatives were established against a target of 175 cooperatives (35 cooperatives had already been established before the project.), and genetic quality for higher production was raised through artificial insemination - about 790,000 calves were borne through these means. Various forms of farmer organizations were also established for different commodities, including for dairies, supported by agricultural extension. About 3,200 Fish farmer groups were formed for tanks and ponds resulting in particularly high growth in productivity (refer below).

Impact

AACP's combination of investment grants coupled with agricultural extension and other farm services, had a notable impact on agricultural productivity. As summarized in the ICR: cropping intensity and crop diversification increased considerably:

Yields:

- Dry season paddy yields increased by 270 percent – from an average 1.5 tons per hectare to 5.5 t/ha, exceeding the targeted yield of 5.0 t/ha.
- Mustard yields increased by 83 percent, from a baseline average of 0.6 t/ha to 1.1 t/ha, also in excess of the targeted yield (0.8 t/ha).
- Cabbage yields increased 51 percent, from 7.0 t/ha baseline to 10.6 t/ha. (The target was 8.5 t/ha).
- Cauliflower yields increased by 75 percent, from 5.6 t/ha to 9.8 t/ha (the target was 7.0 t/ha).
- Fish productivity: in ponds increased sevenfold on average, from 0.5 tons of fish per ha to 3.5 t/ha compared with the target of 1.5 t/ha. In tanks, productivity increased by 150 percent from 0.9 t/ha to 2.3 t/ha (target 2.6 t/ha). And in oxbow lakes, productivity tripled from 0.5 t/ha to 1.6 t/ha (target 1.0 t/ha).
- On lands that had been drained under the project, wet season paddy yields increased from 2 t/ha to 4.4 t/ha.
- The milk productivity of cross-bred cows was five times higher than local cows.

Cropping Intensity

- The average cropping intensity percentage increased from 130 percent to 200 percent, as against the target of 195 percent.

Crop Diversification:

- The proportion of land under cereals fell from 83 percent to 65 percent (the target was a small reduction to 80 percent). The proportion of land under high value crops increased from 17 percent to 35 percent, as against the target of 20 percent.

Summary of Efficacy for Objective 1

AACP generated a major increase in agricultural productivity. Paddy yields more than doubled, yields of mustard, cauliflower and cabbages increased by between 50 and 80 percent, and there was a five-fold increase in milk and fish production. Taking account of significantly increased cropping intensity, and diversification to higher value crops, the full impact on productivity would be greater. The Efficacy of AACP's first Objective to Increase Productivity was High.

An orientation common to both the productivity and the market access objectives was that the project should reach "targeted farmers and community groups." There is no monitorable indicator for this, and it is not a separate objective, but the text of the ICR (pages 18 and 19) indicates that targeted groups means the poor and vulnerable including women and scheduled castes and tribes. As more of the actions related to such target groups were under the component supporting productivity growth, remarks related to reaching the poor and vulnerable



are situated below, although the objective to improve market access contained much of the referred actions as well.

REACHING THE POOR AND VULNERABLE GROUPS

Outputs (implementation achievements)

The primary ways by which vulnerable groups such as the poor, scheduled tribes and castes and women were targeted was through social mobilization of vulnerable groups during the group formation process, use of screening, and some financial incentives. This was coordinated by a unit within the PCU. Group formation, which included involvement of NGOs which were used as a social mobilization process attuned to inclusion of vulnerable groups, Selection of groups was screened for inclusive membership, and some of the selected project activities, such as livestock and fisheries were by tradition almost entirely the domain of women, and also primarily involved poorer families. Also, the Task Team has advised that the project’s investment grants were only available to the landless, marginal farmers (less than 1 hectare), and small farmers (less than 2 hectares).

Impact

While the project itself has favored vulnerable groups through screening processes and motivation by extension staff, the degree to which the project benefitted vulnerable groups is difficult to ascertain as data for non-project rural areas is not provided in the ICR. Nevertheless, the vulnerable were the AACP’s main beneficiaries. Of the 566,000 direct project beneficiaries, 17 percent were landless, 47 percent were marginal farmers, and 31 percent were small farmers. And average net income gains were about 40 percent of the household poverty line. To a large extent, this would reflect Assam’s demographic and economic situation.- AACP was inherently highly inclusive, simply by nature of the high proportion of poor and vulnerable groups in Assam’s rural areas. Thus, the project had some influence towards greater inclusivity, but, due to the lack of data, the degree of impact is uncertain.

Rating
High

Objective 2

Objective

To Increase Market Access

Rationale

INCREASING MARKET ACCESS

Outputs (Physical Achievements)

Market access was improved through a combination of activities. On basic infrastructure, there was the program to upgrade rural roads – 1740 km of roads were rehabilitated or upgraded – about 87 percent of the target. However, 1423 villages were connected to markets, slightly above the targeted 1350 villages. Market infrastructure was also improved with a total of 93 agricultural markets upgraded, about the same as intended. Trading volume of improved markets increased by 30 percent - from 393 tons to 652 tons, 28 percent above the targeted increase. Building community organizations was also a way of providing better connection to markets and higher prices for producers. Farmer groups were formed for a diversity of activities, including for marketing of higher value crops, livestock and agro-service groups, so as to improve access to markets and market-related services. The 294 dairy cooperatives created, including a more effective marketing union, were well in excess of the targeted 175 cooperatives. The Farmer Producer Organizations (formed to link with wholesalers of inputs, and to have greater bargaining power), with 17,000 members, and the pilot Enterprise Development Grant Fund which established 491 groups to advance commercial marketing, were more sophisticated in structure and operations.

Impact

Although there is less information in the ICR on market impacts compared with the data for productivity impact, available information suggests that the project had significant effect on market access and in turn on marketed surplus (proportion of production sold off the farm) of higher value crops:

- Trading volume of improved markets increased by 66 percent, more than twice the targeted increase of 30 percent.
- Traffic density on project roads increased from 96 vehicles per day to 302 vehicles, six percent above the targeted density (Part of the increase is likely to be for non-project related traffic.)
- The marketed surplus of the three crops referred to in the ICR changed as follows:



- 1 Mustard. Marketed surplus increased from 17 percent to 64 percent (the original target was 50 percent).
- 2 Vegetables. Marketed surplus increased from 28 percent to nearly 100 percent (the target was 92 percent). Vegetable farmer groups with organized direct marketing realized a 13 percent increase in prices compared with traditional market channels. With post-harvest processing, prices were about 35 percent higher than through traditional marketing.
- 3 Dry season paddy. Marketed surplus from dry season paddy increased more modestly – from 18 percent to 26 percent – and was below the target of 45 percent. The slower growth in marketed surplus for paddy is likely due to the rapidly diversifying farm base into non-cereal crops.

The Efficacy of AACP's second objective - to Increase Market Access - was Substantial.

Rating
Substantial

5. Efficiency

Economic Rate of Return.

The project's economic rate of return, for the full operation including the AF, is estimated in the ICR to have been about 25 percent (this compares with the ERR estimate at appraisal of 21 percent, although as the two estimates measure different time durations, and the latter includes AF activities, the ERRs are not directly comparable). Project sub-components vary in their economic viability. For the more common activities, estimated ERRs were: 67 percent for the shallow tube-well program combined with improved agricultural extension services; 35 percent for mechanization; 32 percent for micro-watersheds (drainage); 29 percent for fisheries; 27 percent for livestock; and 21 percent for rural roads. The market program on the other hand, had an ERR of 9 percent.

Notes on ERR Methodology and Results.

Data for the ERR calculation was obtained from the M&E program and the baseline and two impact assessments in 2010 and 2015. Sample size for the impact assessments was large, covering about 25,000 households and using a control sample to compare project results with developments without the project. The ICR does not provide an outline of the sampling technique used. In most respects, however, the methodology for calculating the ERR described in the ICR appears sound.

Other indicators of efficiency.

The speed of project implementation was slow in the pre-AF period (till March 2012) with disbursements at the original closure date (March 2010) at about two-thirds of planned disbursement. The rate of disbursements improved, and by project closure (for the original plus AF program), total disbursements were close (94 percent) to the total Credit and AF. Nevertheless, the project's slow progress in the first four years, indicates modest efficiency in AACP's earlier years. But this is balanced by the clear economic benefits from the project found in the economic analysis – the ERR, farmer incomes, rural prices, and productivity. Taken overall (economic and implementation efficiency together), the project's Efficiency is rated Substantial.

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	✓	21.00	100.00 <input type="checkbox"/> Not Applicable
ICR Estimate	✓	25.00	100.00 <input type="checkbox"/> Not Applicable



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

6. Outcome

AACP's objectives targeted two critical issues in Assam – low agricultural productivity and poor access to market outlets – core factors behind the impoverishment of the rural population. The objective to focus on the constraints to poor yields and markets was, thus, highly relevant. The relevance of the project design was substantial. It identified constraints and specific actions to unleash agricultural productivity and market potential, and for most commodities the actions made a difference. The efficacy of increasing productivity was high. Targeted productivity gains were met or exceeded in most cases. Based on available data, efficacy for the second objective - improving market access - is rated substantial. Improved productivity and market access would have been beneficial to rural welfare, and project actions and available information indicate that the poor and vulnerable were favored, although the extent is not clear. The project's efficiency was mixed. Implementation was inefficient in that project progress was slow in the initial years, and the project period was extended by five years. But the project was economically viable, and part of the extended project period was to implement the AF, in effect, making AACP into a larger project. Overall efficiency is thus assessed substantial. With Highly Satisfactory Relevance of Objectives and a Substantial relevance of Design; Efficacies at increasing productivity and improving market access of High and Substantial respectively; and a Substantial rating for Efficiency, AACP's overall Outcome was Satisfactory.

- a. Outcome Rating
Satisfactory

7. Rationale for Risk to Development Outcome Rating

AACP's risks are relatively small. Technologies for irrigation and farm mechanization are simple and well tested. Community organizations appear to be relatively robust given that 95 percent of organizations over three years old were found in M&E surveys to be still functioning at targeted productivity levels. Road maintenance funds provided by the Public Works Department are a regular budget item and nearly twice the targeted amounts. The groundwater monitoring system allows for comprehensive monitoring and a base for better management of groundwater abstraction and for monitoring contaminants such as fluoride and arsenic. Commitment of all implementing agencies and the Assam Government are high, with a number of project activities being mainstreamed state-wide. Risk to Development Outcome is Negligible.

- a. Risk to Development Outcome Rating
Negligible

8. Assessment of Bank Performance

- a. Quality-at-Entry

The project's design was sound in its technical and institutional features, and took account of experience and lessons from other rural projects. Design was more a diverse group of individual actions, which, together with other actions, could make a difference, than it was a comprehensively articulated strategy, although design was couched within a strategic orientation. But this "problem/opportunity/action" approach provided a practical base for the project, with interventions and actions generally well chosen for their impact value. Technical skills of the task team were appropriately diverse, with the expertise to prepare project activities with detailed, practical designs. The monitorable indicators provided the means to assess the outcome against the objectives, and to monitor physical achievements of most sub-components. A risk was that the project was ambitious in terms of the number of activities and agencies involved. Design might have taken more account of the implementation capacity of the agencies involved – for instance more technical assistance might have helped resolve the capacity constraints, or the geographic and/or number of sub-components could have been reduced (although the latter – reducing sub-components – is difficult for a competitiveness driven project (section 3b of this ICRR). Nevertheless, albeit with a substantial extension of the closing date, by the end of the project, nearly all physical objectives were achieved or exceeded, attesting to the generally sound quality of the initial technical detailing. AACP's Quality at Entry is assessed Satisfactory.



Quality-at-Entry Rating
Satisfactory

b. Quality of supervision

The Task Team was effective in working with Government and the implementing agencies, developing close working relations with all parties. The technical diversity of supervision staff and consultants was broad (encompassing, for instance, agriculture, agricultural marketing, irrigation, fisheries, forestry, agricultural mechanization, social mobilization, institutional development, financial management, procurement, and social and environmental specialists). The most effective quality in supervision was its proactive and problem-solving approach, and the timely manner with which issues were identified and tackled. Supervision was flexible, making changes as appropriate. Both procurement and fiduciary management were closely monitored and technical implementation difficulties were addressed through targeted technical assistance. Supervision introduced several significant innovations – the community procurement system established a new model for procurement in rural development projects. And the Groundwater Monitoring Program was taken further than intended at appraisal, and has attracted Government of India's interest for possible replication elsewhere. The Quality of the Bank's Supervision was Highly Satisfactory.

Overall Bank Performance

With project activities designed in detail, proactive supervision, and an innovation focused approach, the Bank designed and promoted a project that met its objectives and piloted significant change in Assam's rural sector. The Overall Performance of the Bank was Satisfactory.

Quality of Supervision Rating
Highly Satisfactory

Overall Bank Performance Rating
Satisfactory

9. Assessment of Borrower Performance

a. Government Performance

The Assam Government was highly committed to the project, exhibiting strong ownership, evident in its support to the Project Coordinating Unit and the line agencies involved. Counterpart funds were provided in full, and in timely fashion. Government also issued some ten policy and legal documents to enable introduction and implementation of various components (as advised to IEG by the TTL, covering: legal provisions for groundwater monitoring, community procurement, road maintenance, resettlement, transfer of milk marketing to a cooperative union, and laws for fish seed, joint forest management, and livestock services cost recovery). The Performance of Government was Satisfactory.

Government Performance Rating
Satisfactory

b. Implementing Agency Performance

The Project Coordination Unit did well in coordinating the work of the eight implementing agencies, and their Project Implementation Units, which were responsible for different parts of the project. The Coordination Unit also provided administrative and backstopping help to the agencies (the Departments of Agriculture, Animal Husbandry and Veterinary, Dairy Development, Fisheries, Environment and Forests, Public Works/Roads West Assam Milk Producers Cooperative Union, and Assam Agricultural University). A dynamic Director and staff in the Project Coordination Unit drove the project forwards. The agency PIUs were initially slow due to capacity constraints in procurement. But after uneven starts, all line agencies and their PIUs, in overall terms performed satisfactorily - a matter reflected in the physical progress of the project, with achievements mostly above targets. Performance of the Implementing Agencies was Satisfactory.

Overall Performance of the Borrower



A supportive Government, well-staffed implementation Unit, and line agencies anxious to learn and undertake their roles in the project, enabled the introduction of significant changes and the achievement of project targets. The overall Performance of the Borrower was Satisfactory.

Implementing Agency Performance Rating
Satisfactory

Overall Borrower Performance Rating
Satisfactory

10. M&E Design, Implementation, & Utilization

a. M&E Design

The M&E program was designed comprehensively, and organized under three functional activities: (i) regular reporting by the involved agencies of physical, financial and output data; (ii) regular monitoring by independent M&E consultants to quantify outputs and outcomes; and (iii) the same consultants were to undertake a baseline study, and comprehensive impact evaluation reports for the Mid-Term Review and at project completion.

b. M&E Implementation

The M&E program started slowly but picked up in performance over time. It became apparent during implementation that some of the indicators being monitored were poorly defined and the indicators lacked social disaggregation. At and after the MTR, such issues were mostly resolved, and M&E performance improved. The surveys planned at appraisal – the baseline, and the two impact assessments - were undertaken. Sample size was large (about 25,000 households) and included control groups, and results were triangulated with field visits. (Beyond the remarks above, there is limited information in the ICR with which to assess the methodology and sampling processes of the M&E surveys.)

c. M&E Utilization

Regularly updated and timely MIS type data was used by project management and the Bank as a source of decisions and actions. Some of the data was used as a basis for developing a Geographic Information System (for instance, tracking progress of shallow tube-well development). The ICR reports that the two impact assessments were used extensively by project management and the Bank supervision and ICR missions. The Task Team has also advised that M&E findings were influential for a number of project decisions, amongst them: the feasibility and dimensions of the scale-up program under Additional Finance, and identification of areas where clearances and processes could be streamlined, especially for the beneficiary-run project components.

M&E Quality Rating
Substantial

11. Other Issues

a. Safeguards

AACP was a category B project and at appraisal triggered the following safeguards: Environmental Management (OP/BP 4.01); Involuntary Resettlement (OP/BP 4.12); Indigenous Peoples (OP/BP 4.10); Natural Habitats (OP/BP 4.04); Forests (OP/BP 4.36); and Pest



Management (OP 4.09). The ICR's safeguards section refers only to the first three (Environmental Management, Involuntary Resettlement, and Indigenous Peoples). To some extent though, the project itself included actions related to these safeguards. Sustainable forest management was promoted through community forest management. On protecting habitat, special attention was paid to ensuring that exotic species of fish were not released into unmanaged water bodies. And monitoring of arsenic and fluoride levels in groundwater provided a base for handling such chemical contaminants. However, specific identification and implementation of each safeguard would have had a better chance of more comprehensive identification and tackling of environmental issues.

Environmental Management.

An Environmental Management Framework was prepared and implemented, and an Environment Management Unit was established. The coordinator of this unit was supported by two consultants. The unit undertook internal audits of environmental compliance together with third-party external audits, and provided management with regular information about the status of environmental compliance. Impact studies on specific issues were also conducted.

Groundwater Monitoring

A notable achievement was to develop a telemetry-based system for monitoring groundwater levels and regulating deployment of wells and sustainable groundwater usage. This was scaled-up, using AF funding, to state-wide coverage, providing the largest data-base on groundwater levels and quality in India, with demonstration value for other states.

Social Impacts

A social Assessment was carried out during project preparation, leading to an implementation emphasis on inclusive service delivery. A cell was established within the Project Coordination Unit, dedicated to leading a social mobilization program for vulnerable communities. And screening criteria were developed to target the poor, women, and scheduled tribes and castes.. For resettlement, a Resettlement and Participatory Framework was developed, primarily to address any adverse impacts from resettlement, but in the event no one was displaced.

b. Fiduciary Compliance

Procurement

Procurement was initially slow, constrained in particular, by limited knowledge of procurement amongst the line agencies. Intensive training by the PCU and provision of a summary procurement guide to the agencies, improved procurement capacity and the pace of project implementation. The ICR comments that transparency was generally adequate. Any complaints were attended to by the PCU. No major procurement issues are reported. The introduction of community procurement (refer below) greatly improved procurement processes.

Community Procurement

An important innovation was the introduction of community procurement, giving authority for decisions to farmer groups. This was mostly used for investments under the tube-well program, farm mechanization, and fisheries. Project management prepared a list of potential suppliers using a transparent decision process and required technical standards, with sale prices quoted by each supplier (the "Rate Bank"). Farmer groups were free to choose equipment suiting their needs at the quoted prices. The groups could also choose suppliers not on the list, providing that prices did not exceed 10 percent above the average prices in the Rate Bank. This process considerably expedited procurement compared with standard competitive bidding, and gave farmers greater flexibility to choose equipment suiting their specific needs. Community procurement was recognized as effective by both the Bank and Government and published as good practice in a document captioned "Innovation in Development." The model was later distributed by Government of India to all states for their consideration.

Financial Management

Financial management was initially weak, but improved significantly over time, with technical assistance from the Bank and the PCU. A three-tier accounting system was established – with the PCU at the apex and district and field level staff at decentralized levels. Provision of Government counterpart funds was regular. Auditing was timely, and audits are reported in the ICR to contain few issues, all resolved quickly.

c. Unintended impacts (Positive or Negative)

d. Other



12. Ratings

Ratings	ICR	IEG	Reason for Disagreements/Comment
Outcome	Satisfactory	Satisfactory	---
Risk to Development Outcome	Negligible	Negligible	---
Bank Performance	Satisfactory	Satisfactory	---
Borrower Performance	Satisfactory	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 AACP's experience provides five main lessons below (lessons 3 and 4 are adaptations from the ICR):

1. A problem/opportunity/action approach in project design can have high-impact value.

AACP's design was mainly an identification, over a large array of agricultural commodities and farm systems, of production and marketing problems; and the finding of practical, technologically simple individual actions to resolve each problem (or interlinked set of problems). This was couched within a general development vision, but emphasis was more on individual actions rather than strategy development. This orientation was effective (for this particular rural development project) in unleashing major changes in productivity, because actions were identified and designed by experienced specialists and were specifically tailored to each commodity and sub-sector for their particular needs. (Though it might have been less effective where a more integrated strategy had greater importance than individually identified actions.) (section 3b of this ICR Review).

2. Safeguards triggered at Appraisal should each be part of project supervision and the ICR.

Six Safeguards were triggered at Appraisal (Environment, involuntary resettlement, indigenous peoples, natural habitats, forests and pest management) yet ICR, reporting covers only the first three. Monitoring should also have covered the remaining three, or, if they were found to be not relevant during supervision, formally removed during one of the restructurings. (section 11a of this ICR Review.)

3. Community Procurement can be an effective way of expediting procurement and reducing costs.

The innovative community procurement system (section 11b of this ICR Review) enabled purchases by farmer groups of good quality farm equipment at competitive prices, gave farmers choice of supplier type and quality of equipment, and was much faster than conventional bidding (section 11b of this ICR Review).

4. Groundwater monitoring and regulations can add significantly to the sustainability of agriculture and the environment.

For a primarily rural development project, the systematic way in which groundwater levels were monitored (section 11a of this ICR Review) went beyond measurement systems typically employed in agricultural projects in India and elsewhere. In Assam, where groundwater overexploitation is an issue, the monitoring system and regulations governing pump spacing could stabilize groundwater abstraction and provide a base for reducing environmental degradation and sustaining future agricultural productivity.

5. Applying for Additional Financing when a project is behind schedule and experiencing implementation difficulties is high risk (although in the case of AACP it worked).

At the time when AF was requested, only about two-thirds of the Loan had been used and project implementation, though improving, was still difficult. Increasing the loan – by nearly one-third – at this time would appear premature. But this risky strategy in the end worked. By project closure, five years after planned closure, the Additional Financing had enabled significantly more achievements than if the project had been closed earlier, and 94 percent of the original loan plus the Additional Financing had been disbursed. However, a more conventional use of Additional Financing - by first ensuring that a project is performing and proceeding well, and that successful scale-up is likely, would seem more appropriate in most cases (section 3b of this ICR Review).

14. Assessment Recommended?



Yes

Please explain

As part of a cross-country review of procurement practices for community-based development projects, to assess and compare innovations, implementation issues and options for procurement of small to medium-sized investments ((background on AACP's community procurement initiative is at section 11b of this ICR Review).

15. Comments on Quality of ICR

The ICR presents information on project impacts well. The log frame provides comprehensive information to evaluate performance against the monitorable indicators. Sections 3.1 to 3.4 are well ordered in methodically covering relevance, efficacy and efficiency although more discussion of outcome as well as outputs would have been desirable. Annexes 2 and 3, on, respectively, outputs by component, and the economic analysis, are particularly good evaluations. By contrast, the assessment of safeguards was incomplete – all safeguards triggered at appraisal should have been reviewed rather than only a sub-set of these.

There are two areas which could have been further reviewed: (i) more background and explanation concerning the decision to apply for an AF; and (ii) explanation on what the project specifically did to promote participation of landless and small and marginal farmers. In addition, because AACP forged new approaches to procurement, with communities as the decision makers, and introduced an innovative groundwater monitoring system, the learning value of the ICR for other states and countries would be enhanced if these two initiatives had been described and discussed in more detail. But overall, the ICR is a thoughtful and strong review, which covers the main evaluation needs, and its Quality is Substantial.

- a. Quality of ICR Rating
Substantial