



1. Project Data

Project ID P133326	Project Name Poverty Alleviation in Poor Areas	
Country China	Practice Area(Lead) Agriculture and Food	
L/C/TF Number(s) IBRD-85090	Closing Date (Original) 30-Jun-2021	Total Project Cost (USD) 148,313,539.33
Bank Approval Date 23-Jun-2015	Closing Date (Actual) 30-Jun-2022	
	IBRD/IDA (USD)	Grants (USD)
Original Commitment	150,000,000.00	0.00
Revised Commitment	148,313,539.33	0.00
Actual	148,313,539.33	0.00

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2. Project Objectives and Components

a. Objectives

The Project Development Objective (PDO) of the Poverty Alleviation and Agriculture-based Industry Pilot and Demonstration in Poor Areas Project as articulated in the Loan Agreement (LA, page 5) was identical to the one stated in the Project Appraisal Document (PAD, paragraph 13) and aimed to:

"develop and demonstrate rural value chains that promote equitable organizational arrangements, participation, and the sustainable increase of income of target households in the Project Provinces."



Parsing the PDO. The PDO will be parsed based on the following three objectives:

1. To develop rural value chains.
2. To demonstrate the promotion of equitable organizational arrangements and participation in the project-supported value chains.
3. To achieve sustainable increase of income of target households.

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 the following four components:

1. Integrated Value Chain Development (appraisal cost: US\$195.70 million, actual cost: US\$204.20 million). This component supported (a) farmer cooperative formation and strengthening, development of functional offices, and value addition: provision of financing to agro-enterprises for investments in commercial processing, storage, and packaging of agricultural produce, in partnership with farmer cooperatives; (b) grants to the Cooperatives Development Fund (CDF) for agricultural products and services for value chain development; and (c) technical training and services to farmers, communities, and cooperatives through qualified agricultural enterprises.

2. Public Infrastructure and Services (appraisal cost: US\$66.90 million, actual cost: US\$59.90 million). This component supported (a) public infrastructure including construction of production roads, irrigation and drainage infrastructure, and establishment of information and communication technology and (b) public services including development and operationalization of food testing certification facilities and carrying out of agricultural research and technology transfer and studies for market exploration, development, and product marketing.

3. Research, Training and Extension (appraisal cost: US\$0.7 million, actual cost: US\$0.7 million). This component supported learning and dissemination of project implementation lessons to support the implementation of China's national poverty reduction strategy through analytical studies; capacity building of government line agencies, entrepreneurs, and public sector institutions; technical assistance and training to farmers and agricultural technicians, including the review and improvement of investment proposals for key commodity value chains; and preparation of policy and appraisal guidelines for public sector support in rural areas.



4. Project Management, Monitoring and Evaluation (appraisal cost: US\$10.00 million, actual cost: US\$5.70 million). This component supported institutional strengthening and capacity building of the Project Management Offices (PMOs) at the county, municipal, and provincial levels.

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

Project Cost. Total project cost was estimated at US\$295.10 million, including price contingencies of 4% averaged across the three provinces. The actual cost was US\$279.51 million (ICR Data Sheet, page 2). The difference was due to the cost savings through competitive bidding (ICR, Annex 3).

Financing. The project was financed through an IBRD loan worth US\$150.00 million. The actual amount disbursed was US\$148.31 million (ICR Data Sheet, page 2).

Borrower Contribution. The Government was expected to provide counterpart funds of US\$145.10 million. The actual amount contributed was US\$131.20 million (ICR Data Sheet, page 2).

Dates. The project was approved on June 23, 2015 and became effective six months later on December 24, 2015. The Mid-Term Review (MTR) was conducted on September 17, 2017 which was six months earlier than the expected date of March 15, 2018 as reported in the PAD. The project closed on June 30, 2022 compared to an original closing date on June 30 2021. The project was restructured once (Level 2) on January 22, 2020, when the amount disbursed was US\$68.81 million, in order to revise the Results Framework, change components and cost, extend the Loan closing date by one year, reallocate funds between disbursement categories, change disbursements arrangements, and change the implementation schedule. According to the ICR (paragraph 22) the extension of the closing date was needed to allow the cooperatives more time "to complete the agreed investments, fully operationalize their value chains, and start making profit to achieve the project objectives."

The targets for two PDO indicators were revised ICR (Tables 1). The target for PDO indicator 1 i.e., 'Direct project beneficiaries' was increased to reflect the exchange rate gains which would benefit more people whereas the target for the PDO indicator 2 i.e., 'Share of project-supported cooperatives making profit in each year was revised from 40 to 30%' due to the weak capacity of some counties. Since the original and revised targets were exceeded, a split rating will not be applied to assess the project outcome.

3. Relevance of Objectives

Rationale

Context at Appraisal. In 2013, about 83 million people were still living in poverty, especially in the western and inland provinces of China. The agriculture sector potential to stimulate rural transformation and reduce rural-urban inequality was constrained by the large number of unorganized household farms, poorly organized and scattered value chains, low technology and management standards, substandard product quality, lack of marketing, low production volumes, and inadequate public infrastructure and services. This project aimed to address the aforementioned challenges through investing in: developing professional farmer cooperatives; aiding partnerships between cooperatives and the private sector for value chain



development and marketing; providing public infrastructure, advisory, and extension services; and providing capacity building, training, and research.

Previous Bank Experience. The Bank and China have had a long history of cooperation in different sectors including infrastructure, environment, irrigation and agriculture. This project builds on a body of Bank-funded project experiences and knowledge that was built up in recent years on pro-poor value chain development, emphasizing the complementary roles of the public and private sectors.

Consistency with Bank Strategies. At appraisal, the PDO was in line with the Bank Group's Country Partnership Strategy (CPS, FY2013–FY2016) for China. The project supported the CPS' strategic theme two: promoting more inclusive development, by geographically focusing on lagging regions and small towns and by supporting policies and demonstration projects that address inequalities. It also contributed to the CPS outcome 2.3: enhancing opportunities in rural areas and small towns, by piloting new ways to boost rural incomes and reduce poverty under the umbrella of the new Poverty Reduction for China's Rural Areas Strategy (2011-2020) and by promoting inclusive innovation to decrease disparities.

At completion, the PDO continued to be in line with Bank Group's Country Partnership Framework (CPF, FY2020-FY2025). Specifically, it supported two of three CPF engagement areas, namely, promoting greener growth and sharing the benefits of growth. The project also supported three objectives: 2.3. Demonstrating sustainable agriculture practices and improving food system quality and safety; 2.4: Strengthening Sustainable Natural Resource Management; and 3.2. Enhancing the quality of early learning and skills development programs.

Consistency with Government Strategies/ Priorities. At appraisal, the PDO was in line with China's 12th Five Year Plan. The PDO was also in line with the Outline for Development-oriented Poverty Reduction for China's Rural Areas (2011- 2020) issued by the CPC Central Committee, and the Views on Promoting Rural Poverty Alleviation through Innovative Mechanism, issued by the General Office of the CPC Central Committee and the General Office of the State Council, as well as provincial strategies and programs for rural development and poverty reduction of Sichuan, Guizhou and Gansu Provinces.

At completion, the PDO continued to be in line with the national priorities outlined in China's 14th Five Year Plan (2021–2025). The plan recommended agriculture modernization and integrated rural development, including development of agricultural value chains led by farmer cooperatives in collaboration with private sector investments. The PDO was also in line with China's national Outline for Development-oriented Poverty Reduction for China's Rural Areas (2011–2020)', which sought to capitalize on the potential of the agriculture sector to stimulate further rural transformation and modernization. The plan featured three main areas: (a) the use of agriculture value chains to capture opportunities for poverty reduction; (b) development of specialized farmer organizations /cooperatives; and (c) expansion of the existing system of geographical poverty targeting of nationally or provincially designated national poverty counties and villages. The projects supported the aforementioned three areas and promoted a multi-sectoral development-oriented poverty reduction approach in which rural industrialization was the key element.

Summary of Relevance of Objectives Assessment. The PDO statement was pitched at an adequate level of ambition. At completion, the PDO continued to be in line with the Bank strategies and the Government priorities, as explained above. Therefore, the Relevance of Objectives is rated High.

Rating



High

4. Achievement of Objectives (Efficacy)

OBJECTIVE 1

Objective

To develop rural value chains.

Rationale

Theory of Change (ToC). To achieve the stated objective, the project would establish/strengthen farmer cooperatives, establish community-based production arrangements, and provide business, management and technical training and services to farmers, cooperatives, and enterprises through qualified agricultural enterprises. The expected outputs of these activities included: establishing 415 legally registered cooperatives, 451 cooperatives received CDF support, 30% of cooperatives paying out dividends, 85 cooperatives established joint production arrangements with enterprises, and e-commerce platforms developed. This was expected to result in functional business-oriented cooperatives and the creation of productive value chains. The expected outcome would be the development of agricultural value chains.

The achievement of the PDO was underpinned by the following four critical assumptions: 1. The enabling policy environment for cooperative management and sustainability would continue, 2. Farmers would be interested and willing to join the cooperatives, 3. Pro-poor cooperatives would be able to prepare and execute their commodity development and marketing plans, and 4. Private sector enterprises would be willing for business partnerships with the cooperatives.

Overall, the activities stated in the ToC were linked to the outputs and the outcomes in a plausible causal chain. The critical assumptions were logical and realistic.

Outputs/Intermediate Results

- 408 cooperatives were established and registered legally substantially achieving the target of 415. The project provided support to strengthen cooperatives by establishing systems for governance and management such as holding regular cooperative assemblies, appointing a board of directors and supervisors, having transparent fiduciary arrangements, and capacity building of staff. The project also supported the introduction of an online financial accounting software adopted by all cooperatives. This improved their financial management (FM), business planning, and decision-making processes, and promoted transparency and benefit sharing with members. The cooperatives were provided with equipment, quality training, and business advisory services for value chain development and marketing.
- The market linkages formed by the cooperatives were productive as evidenced by the fact that 61.5% of members bought their inputs and marketed their products through the cooperatives exceeding the end target of 60%. The CDF funds, in Gansu Province, the cooperatives installed 161,224 sets of production equipment, constructed 14 breeding farms, and purchased production materials such as high-quality seedlings, breeding stock, and organic fertilizer.



- 994 km of roads were improved by the project exceeding the end target of 700 km. The counties reported that the improved roads reduced their travel time, production/marketing cost, and operation and maintenance (O&M) cost (ICR, paragraph 29).
- The cooperatives received brand names or registration for 64 products exceeding the end target of 50, these included: 45 green agriculture, 12 organic, and 7 Geographical Indication (GI) products. Branded and certified products opened new marketing opportunities for cooperatives in niche domestic and international markets (ICR, paragraph 30).
- The project provided 252,983 person-days of services, which was 2.5 times higher than the end target of 100,000 person-days.
- 14 analytic studies and assessments were commissioned by the project to improve performance and disseminate the project learning and experience, exceeded the end target of 6.
- 47 provincial/national-level knowledge-sharing seminars and workshops were organized, exceeding the end target of 40.

Outcome(s)

- This outcome was measured through PDO outcome indicator #4: the average score of project-supported cooperatives in the Management Effectiveness Tracking Tool (METT). By project completion, the METT average score was 63.28 significantly exceeding the original target score of 40 (158% achievement). The METT tracked mainly the cooperatives' development objective, business plan, inclusion of poor, market information and strategy, enforcement of regulations and production infrastructure, among other things (ICR, paragraph 26).
- The above-mentioned achievement suggests that the project was able to raise the cooperatives' management capacity to a higher level than anticipated at appraisal. The ICR (paragraph 27) reported that the improved quality/management capacity was evident in 103 cooperatives in Sichuan Province. These were regarded as "exemplary cooperatives with competent management, large-scale operations, and solid business plans." Also, in Guizhou province, 21 cooperatives were recognized as demonstration cooperatives, with 2 at the county, 9 at the municipal, 8 at the provincial, and 2 at the national level (ICR, paragraph 27).

Summary of Efficacy Assessment. The project exceeded its PDO outcome target as well as all intermediate results indicator targets. The evidence provided in the ICR and discussed above point to the success of the project in developing effective rural value chains. Therefore, the efficacy with which this objective was achieved is rated High.

Rating

High

OBJECTIVE 2

Objective

To demonstrate the promotion of equitable organizational arrangements and participation in the project-supported value chains.

Rationale



Theory of Change (ToC). To achieve the stated objective, the project would organize cooperative management training, and support business, management and technical training and services to farmers, cooperatives, and enterprises through qualified agricultural enterprises. As a result of these activities, cooperatives would have received organized management training, cooperatives would qualify to receive CDF support, the percentage of cooperative members who would buy inputs or market production through cooperatives would increase, and the percentage of poor households joining the cooperatives would increase. The expected outcome would be demonstrating the promotion of equitable organizational arrangements and participation in the project-supported value chains.

The achievement of the PDO was underpinned by the following four critical assumptions: 1. The enabling policy environment for cooperative management and sustainability would continue, 2. Farmers would be interested and willing to join the cooperatives, 3. Pro-poor cooperatives would be able to prepare and execute their commodity development and marketing plans, and 4. Private sector enterprises would be willing for business partnerships with the cooperatives.

Overall, the activities stated in the ToC were linked to the outputs and the outcomes in a plausible causal chain. The critical assumptions were logical and realistic.

Outputs/Intermediate Results

- 408 cooperatives had organized management training substantially achieving the target of 415.
- 407 cooperatives received CDF support substantially achieving the target of 415.
- The project provided needs-based training and skills enhancement opportunities that benefited more women and poor households. The project overachieved in terms of the total amount of training and skills enhancement opportunities provided to cooperative members (199,654 person-times compared to the end target of 150,000 person-times). The proportion of female and minority members who received training was also higher than targeted by 149% and 148%, respectively. Also, 80% of the recipients of technical and production and management training were from poor households (ICR, paragraph 33).

Outcome

- The project put in place mechanisms to ensure equitable organizational arrangements and participation of women, the poor and ethnic minorities in value chains. This included eligibility criteria for accessing the CDF which required the cooperative's articles of association and implementation plan to contain preferential policies and conditions in favor of poor households, and limits on the proportion of shares that non-poor households could hold. In addition, to discourage elite capture, the cooperatives' management posts were voluntary with no salary and benefits; selection of tenure-based cooperative board and management were through ballot to improve equity and governance; and inclusion of women and ethnic minorities to cooperatives' board and management positions (ICR, paragraph 32). As a result of these measures, 82.9% of poor households joined the cooperatives exceeding the end target of 60%.
- The cooperative model enhanced the members' production skills, management capabilities, and business decisions and helped small holders, females and minorities overcome the market failure. This was demonstrated in Sichuan Province with the farmers' successful production systems included 1,706 ha of walnuts, 757 ha of sweet oranges, 428 ha of white konjac, 569 ha of potatoes, 23,000 heads of Simmental cattle, 10,000 chickens, and 202,000 running pheasants. Finally, 60% of



cooperative had their members buying inputs or marketing production through cooperatives substantially achieving the target of 61.5%.

Summary of Efficacy Assessment. The project fully achieved or substantially achieved all the intermediate results indicators pertaining to this objective. The evidence provided in the ICR and discussed above point to the success of the project in demonstrating the promotion of equitable organizational arrangements and participation in the project-supported value chains. Therefore, the efficacy with which this objective was achieved is rated Substantial.

Rating

Substantial

OBJECTIVE 3

Objective

To achieve sustained increase in incomes of target households.

Rationale

Theory of Change (ToC). The activities under objectives 1 and 2 pertain to this objective. In addition, the project would construct road, irrigation and drainage, and market infrastructure, establish communication and information infrastructure, develop food testing certification facilities, and carry out agriculture and market research and support technology transfer. The project would also conduct analytical studies on poverty reduction and value chains, build value chain development capacity of government line agencies and entrepreneurs, and provide policy and appraisal guidelines for public sector support to rural areas. The outputs of the afore-mentioned activities included: 700 km of production roads built/improved, e-commerce platforms established, 64 agriproducts issued branding names or receiving certification, advisory services provided to cooperatives on regular basis, the completion of 14 analytical studies completed and disseminated, and 40 national/provincial-level workshop and seminars completed. This would contribute to functional business-oriented cooperatives, creation of productive value chains, and increase access of cooperatives to infrastructure and services to optimize value chains. The expected outcome was achieving a sustainable income increase of target households.

The achievement of the PDO was underpinned by the following four critical assumptions: 1. The enabling policy environment for cooperative management and sustainability would continue, 2. Farmers would be interested and willing to join the cooperatives, 3. Pro-poor cooperatives would be able to prepare and execute their commodity development and marketing plans, and 4. Private sector enterprises would be willing for business partnerships with the cooperatives.

Overall, the activities stated in the ToC were linked to the outputs and the outcomes in a plausible causal chain. The critical assumptions were logical and realistic.

Outputs/Intermediate Results

- 217 cooperatives with production arrangements with enterprise partners significantly exceeding the target of 100.



- 199,654 cooperative members were trained, by gender and ethnic minority (person-times, cumulative) significantly exceeding the target of 150,000.
- 994 km of production/tractor roads were built or improved by the project significantly exceeding the target of 700 km.
- 252,983 persons-days of advisory services provided to cooperatives (cumulative) significantly exceeding the target of 100,000.
- 63 agro-products received brand naming or certification issued under the project exceeding the target of 50.
- 41 analytical studies were completed/and disseminated exceeding the target of 6.
- 47 provincial/national seminars/workshops were completed exceeding the target of 40.
- 48,371 training (person-times) in project management were completed by PMO staff at all levels significantly exceeding the target of 10,000.

Outcome(s)

- The project promoted a productive partnership (company + cooperative + farmer) model and contract farming along with a stable production/sales relationship for farmers' integration into the market. By project completion, 289 out of 408 cooperatives were profitable (71.2% exceeding the end target of 30%, PDO Indicator 2). In Gansu, 77.2% of cooperatives were profitable, followed by 62.5% in Guizhou and 59.2% in Sichuan (ICR, paragraph 34). Attracting private investments by the cooperatives was demonstrated by more than double the number of private enterprises signing contracts with cooperatives than targeted (217 enterprises against the end target of 100). A total of US\$208.4 million was invested in the comprehensive value chain development, exceeding the end project investment target by 4.9%.
- The e-commerce platform promoted and supported by the project allowed the cooperatives in remote areas to access remunerative markets. The success of the value chains was also demonstrated by the fact that 63% of cooperatives were paying dividends to their members against the end target of 30%. In Sichuan, 38 of the 61 profitable cooperatives paid dividends to their members. In Guizhou, 21 of the 25 profitable cooperatives paid a dividend of US\$60 per member to 6,627 members (ICR, paragraph 34).
- The ICR (paragraph 35) reported that incomes of member households increased sustainably, with 24.5% contribution to the incremental increase in the farm income against the end target of 25% (PDO Indicator #3). Household income increases mainly resulted from: cooperatives providing cheaper production materials to members, households providing raw materials and labor to the cooperatives, value chains providing full-time/partial employment opportunities, farmers receiving higher farm gate prices, and dividend income accruing to the members (ICR, paragraph 35).
- According to the ICR (paragraph 36) "the cooperatives accorded higher priority to poor households and offered them more income earning and employment opportunities." Under the project support, 80% of poor households received training in production technology and 81% benefitted from production and operation information services. Also, 56% of ethnic minority members obtained their means of production from the cooperatives with a saving of US\$507 in production costs.
- The poor households also benefitted from the cooperatives' provision of product protection prices with the flexibility to sell their produce at a higher price in the market. In 2021, poor households were paid an average dividend of US\$30 per household which was 7.4% higher than the average dividend of US\$28 paid to non-poor households. In Sichuan, the ratio of cooperatives with preferential equity and dividend allocation to poor households was 42.9 and 41.8%, respectively (ICR, paragraph 36).



- The number of direct beneficiaries reached 699,163 members exceeding the end target of 500,000 by 140%. The project also exceeded the end target of poor and minority direct beneficiaries by 116 and 145%, respectively (PDO Indicator #1). Finally, a 97% majority of the beneficiaries were satisfied with the services and benefits provided by the project against a target of 80% satisfaction (PDO Indicator #5).

Summary of Efficacy Assessment. The project exceeded its PDO outcome indicator targets pertaining to this objective. Also, most of the intermediate results indicator targets were either met or exceeded. Overall, the evidence provided in the ICR pointed to the success of the project in achieving an increase in incomes of target households. However, more time is needed to demonstrate that the increase in household income is sustainable. In a further communication, the project team explained that "by organizing farmers into business oriented cooperatives and linking cooperatives to enterprises (for value addition and access to market) the project helped beneficiaries increase income. This contractual arrangements between cooperatives and enterprises can help sustain farmers' incomes." Therefore, the efficacy with which this Objective was achieved is rated Substantial.

Rating
Substantial

OVERALL EFFICACY

Rationale

Overall efficacy is rated Substantial. The project was successful to develop rural value chains(Objective 1), demonstrate these were equitable and inclusive (Objective 2), and achieve an increase in incomes of target households, that was expected to be sustainable (Objective 3).

Overall Efficacy Rating

Substantial

5. Efficiency

Economic and Financial Analysis (EFA)

ex ante

- The overall Economic Internal Rate of Return (EIRR), taking into account all overhead costs, was estimated at 17.3%, with a Net Present Value (NPV) of RMB721 million. Financial rates of returns (FRRs) at the production level ranged from 6.1% to 38.8%.



- The analysis featured a standard cost-benefit analysis of various value chain production systems in the project areas was carried out to assess the project's economic impact. The analysis has therefore calculated the financial and economic viability of a range of typical farming activities for the identified value chains on a household or per hectare basis.
- Benefits would result from: (a) the adoption of new production standards and technology packages, leading to increased output and increased factor productivity; (b) reduced post-harvest losses; (c) improved produce processing and/ or packaging; (d) better access to services, markets, and information; (e) reduced transaction costs; (f) improved product quality and producer (farmgate) prices; (g) higher production values through market differentiation (e.g., through product certification, brand naming etc.), and (g) advantages from economies of scale.
- Sensitivity analysis. The economic return was not very sensitive to increases in the project investment costs. A cost increase of 10% would reduce the EIRR by 1.6% and a cost increase of 20% would reduce the EIRR by 3.1%. The project's economic viability, however, was sensitive to changes in the agricultural product prices. For example, if all output prices would drop by 10% the EIRR would drop from 17.3% to 11.3%.
- Overall, the PAD included a robust EFA that provided a solid justification of the project investments.

ex post

- The overall project EIRR was estimated at 17% which was above the discount rate of 6%, indicating that the project was economically viable and robust. The results also showed that 90% of the cooperatives (66 out of the 73 sampled) were financially viable with a financial internal rate of return (FIRR) above 8%. However, the ex post EIRR could not be compared with the EIRR at appraisal as two different methodologies were used (ICR, Annex 4).
- The ex post financial analysis was conducted based on the operation of the cooperatives, which adopted a value chain approach instead of the farm/crop models of specific commodities approach used at the appraisal stage. Among the 408 project-supported cooperatives, 73 representative cooperatives (18% of the total with 32, 20, and 21 cooperatives from Gansu, Guizhou, and Sichuan, respectively) were selected for the analysis based on coverage of major value chains; scope, size, and age of cooperatives; and duration of operation and geographic location.
- There was no ex post sensitivity analysis because according to the ICR (Annex 4) "the output prices were conservatively estimated and the cooperative investment costs were actual, which did not give rise to more variations to be assumed."
- Overall, the ex post analysis provided enough justification for the project investments.

Implementation efficiency. The project required a one-year extension. The ICR (paragraph 42) noted that the extension was needed to "fully complete all planned investments and realize the intended objective of institutional learning and demonstration."

Summary of Efficiency Assessment. The ex post EIRR was estimated at 17% which was higher than the discount rate at 6%. While the ex post EIRR was almost similar the estimate at appraisal (17.3%), both rates were not comparable due to different methodologies. Overall, 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	✓	17.30	0 <input checked="" type="checkbox"/> Not Applicable
ICR Estimate	✓	17.00	0 <input checked="" type="checkbox"/> Not Applicable

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

6. Outcome

Relevance of Objectives was rated High. The project was successful to develop rural value chains (Objective 1), demonstrate these were equitable and inclusive (Objective 2), and which achieved an increase in incomes of target households, that was expected to be sustainable (Objective 3). Efficiency was rated Substantial.

Based on the assigned ratings for the three outcome criteria, the Outcome of the project is rated Satisfactory.

a. Outcome Rating

Satisfactory

7. Risk to Development Outcome

The ICR discussed the following risks that could potentially impact the Development Outcome:

1. Institutional risk. This risk relates to the need for continued institutional support and capacity building for farmer cooperatives. Many of the farmer cooperatives supported by the project have not yet established sustainable sales and marketing channels as they have focused more on investing in the production process than on developing market linkages. With farmer cooperatives at various stages of development, they are expected to require further guidance, technical backup, and training to be sustainable. The provincial PMO is committed to providing continued management, technical, and business support to the cooperatives, including linking them to markets. Also, the provincial governments issued a directive in August 2022 for the O&M and management of assets created by the poverty reduction programs for sustainability (ICR, paragraph 63).

2. Financial risk. This risk relates to the cooperatives' financial sustainability. By project completion, many farmer cooperatives are still not financially sustainable enough to absorb the market risks. This risk is expected to be mitigated through private-sector linkages and co-financing arrangements, which would provide the cooperatives with clear business rationale, sound management, and business planning to enhance market competitiveness for longer-term sustainability. The provincial governments have committed



to facilitating partnerships between the cooperatives and private enterprises going forward (ICR, paragraph 64).

8. Assessment of Bank Performance

a. Quality-at-Entry

- **Strategic Relevance and Approach.** The project was strategically relevant and in line with Bank strategies and Borrower priorities for the agriculture sector (see section 3 for more details). The project supported three elements of the China's poverty reduction strategy (2011-2020) namely, the use of agriculture value chains to capture the opportunities for poverty reduction, the development of specialized farmer organizations, and supporting poor households.
- **Technical, Financial, and Economic aspects.** The project addressed a number of market failures related to barriers to entry, stakeholder diversity in combination with weak organizational structures, and imbalance in access to knowledge and information of poverty households. The project design featured an integrated development approach, combining infrastructure investment, institutional strengthening, and value chain development for poverty reduction. Design aimed to leverage private sector investments, for viability and sustainability of the value chains. The PAD included a robust economic and financial analysis that justified the project investments.
- **Poverty, Gender, and Social development aspects.** The project aimed to reduce rural poverty by capitalizing on the agriculture sector potential for stimulating modernization of agriculture and reducing rural-urban inequality. Design supported targeting of benefits to specifically include poor households to ensure inclusion. This included eligibility criteria for receiving CDF support, where a cooperative's articles of association and implementation plan must reflect preferential policies and conditions for poor households. Design also featured a gender-sensitive approach to ensure women's equal participation and empowerment.
- **Environmental and Fiduciary Aspects.** The project design included appropriate environmental and social risk assessments with adequate mitigation strategies.
- **Implementation Arrangements.** Implementation arrangements at the central, provincial municipality, and county levels were adequate. The PAD reflected clear articulations of responsibilities for each management level. According to the ICR (paragraph 49) "the implementation arrangements were effectively designed with responsibilities clearly defined for the PMOs at all levels."
- **Risk Assessment.** The overall risk rating was Substantial. Identified risks related to three main areas: stakeholders, implementing agency and project risks. According to the ICR (paragraph 49) "risks to the PDO achievement were well identified, along with the mitigation measures incorporated into the project design."
- **M&E Arrangements.** Institutional responsibilities for M&E were well defined. However, M&E design had suffered from minor shortcomings in the formulation of PDO indicators and IRIs (see section 9a for details).

Summary of QAE Assessment. The project was strategically relevant with a clear PDO. The project design relied on an integrated development approach, combining infrastructure investment, institutional strengthening, and value chain development for poverty reduction. Design reflected adequate



environmental and fiduciary aspects. Also, poverty and gender aspects were adequately covered. Implementation arrangements were clearly articulated, and risks were well identified along with adequate mitigation measures. M&E had some design shortcomings. Overall, QAE is rated Satisfactory with minor shortcomings.

Quality-at-Entry Rating Satisfactory

b. Quality of supervision

- The Bank team conducted 14 implementation support missions (ISMs) throughout the project. These included regular missions with field visits. ISMs were conducted virtually during the COVID-19 restrictions. Overall, all the Bank provided careful review and rating of the project implementation progress (ICR, paragraph 61).
- The Bank team provided guidance and support for institutional strengthening especially in fiduciary management and safeguards. The team also provided strategic and operational guidance to improve project performance through identifying implementation shortcomings and recommending appropriate solutions (ICR, paragraph 61).
- However, the project could have benefited from an earlier attention to M&E shortcomings.

Summary of Quality of Supervision Assessment. The Bank team successfully guided the project to achieve the project objectives. The team provided support to address implementation bottlenecks and virtually guided the project through the COVID-19 restrictions. However, the Bank could have addressed M&E shortcomings at an earlier stage. Overall, Quality of Supervision is rated Satisfactory.

Based on the assigned rating to QAE and Quality of Supervision, Bank Performance is rated Satisfactory.

Quality of Supervision Rating Satisfactory

Overall Bank Performance Rating Satisfactory

9. M&E Design, Implementation, & Utilization

a. M&E Design

- The PAD did not include a Theory of Change (ToC) as it was not required by the Bank at the time of appraisal. Nonetheless, the ICR included a ToC that was constructed based on the project activities, outputs, and outcomes as described in the PAD. The ToC also included the underlying assumptions that underpinned the achievement of the PDO. Overall, the ToC had clear links between the stated activities, outputs, intermediate outcomes and project development outcomes.



- The PDO was measured through four PDO outcome indicators: (i) Number of beneficiaries by gender, poverty level and ethnic status (outreach indicator); (ii) Share of project-supported cooperatives making a profit (financial success and sustainability indicator); (iii) Incremental farm income generated by project activities (economic success indicator); and (iv) Cooperative management effectiveness, measured by the Management Effectiveness Tracking Tool (institutional development and sustainability indicator). These four indicators were directly connected to the PDO, measurable and had reasonable targets. However, equitable organizational arrangements and sustainable increase of income lacked clearly defined measurable indicators (ICR, paragraph 53).
- The Results Framework (RF) included fifteen intermediate results indicators (IRIs) to track the progress of the project and measure achievements of different activities. Overall, the IRIs were measurable and most were connected to the supported activities. However, the IRIs were disproportionately assigned with 8 IRIs covering activities under component 1, and 7 IRIs for components 2, 3, and 4 together (ICR, paragraph 53). However, some supported activities were not tracked including irrigation and drainage.
- According to the ICR (paragraph 53) "institutional responsibilities for M&E were well defined with the provincial PMO for overall planning, coordination, and M&E implementation; external agencies for independent assessments."
- Overall M&E design was adequate with some shortcomings related to the formulation of PDO indicators and the IRIs.

b. M&E Implementation

- The project contracted external entities to conduct an independent evaluation of project interventions at three stages: a baseline at project start, a follow-up before midterm, and a final round at completion (ICR, paragraph 54).
- Data on the implementation progress was entered into the management information system (MIS) with a delay. This resulted in a lag between the actual progress on the ground and the recorded progress through the MIS. The project adopted the METT tool to review cooperatives governance and management effectiveness.
- The project appointed one M&E officer in each PMO. The ICR (paragraph 54) noted there were some inconsistencies for a few IRIs in the MIS records and ISRs, which were verified and rectified during the preparation of the ICR.
- Restructuring and Revision of the RF. A level 2 project restructuring took place in January 2020. It included a revision of PDO indicators and intermediate results indicators. The four PDO indicators had minor revisions to simplify measurement and/or reflect changes in the implementation environment. Also, a fifth PDO "Percentage of beneficiaries satisfied with the services provided by the project" was added. In addition, 11 IRIs were revised to reflect new government priorities and/or new slightly increased/decreased targets that better reflect actual achievements on the ground.
- Overall, M&E implementation was adequate.

c. M&E Utilization



- M&E data were used to assess the project's implementation status and progress toward the achievement of the PDO achievement. Also, M&E reports informed project management on implementation issues that required additional efforts and resources (ICR, paragraph 55).
- M&E provided relevant information on the profitability of the cooperatives to assess their financial viability and sustainability. Furthermore, the METT data provided key information to assess cooperatives governance and management effectiveness.
- Finally, the M&E system facilitated the identification of the best practices for replication and scaling up. The ICR did not elaborate on the best practices that were scaled up. In a further communication, the project team explained that best practices included: "(a) Comprehensive inclusive pro-poor value chain development approach adopted by the project from mobilizing poor and marginalized farmers into business oriented cooperatives, establish industrial chain model (farmer + cooperative + company) from farm to fork has been very well received by the government and communities and has opened new avenues for poverty alleviation of poor communities/remote areas in China; (b) Cooperatives entering into business partnerships with private sector/enterprise and attracting investments, improved technology, better management practices and better access to markets and using the services of high quality professional/technical experts is a good practice of establishing competitive value chains of high quality; (c) Establishing farmer cooperatives with dual purpose of being commercially successful as well as equitable/pro-poor with higher percentage of benefits to the poor and minority households; and (d) Branding and certification of cooperative products as a sign of high quality and entry to niche markets earned higher profits for the cooperatives."

Summary of M&E Quality. M&E design had some shortcomings that were mostly addressed at restructuring. M&E implementation was effective and gathered enough information to assess the achievement of the PDO. M&E utilization was adequate as M&E data informed management decisions and helped to identify best practices for scaling up. Overall, M&E Quality is rated Substantial.

M&E Quality Rating

Substantial

10. Other Issues

a. Safeguards

The project was classified as an environmental Category B-partial assessment since the project interventions were primarily of small scale, and any negative environmental impacts would be readily avoided and mitigated. The project triggered three environmental safeguards policies: Environmental Assessment (OP/BP 4.01), Natural Habitats (OP/BP 4.04), and Pest Management (OP 4.09). In addition, the project triggered two social safeguards policies: Indigenous Peoples (OP/BP 4.10) and Involuntary Resettlement (OP/BP 4.12). The following documents were prepared as part of the mitigation measures: Resettlement Policy Framework (RPF), An Ethnic Minority Development Plan (EMDP), an Environmental Management Plan (EMP) Environmental Management Framework (EMF) and a Pest Management Plan (PMP).

Compliance with Environmental and Social Safeguards. According to the ICR (paragraph 57) "all applicable environmental and social safeguards policies were complied with, and the overall performance



was Satisfactory." The project provided capacity-building support and training to strengthen the initially limited safeguards implementation capabilities of PMOs. "No major safeguards issues arose during implementation (ICR, paragraph 57)."

b. Fiduciary Compliance

Financial Management (FM). The project's FM performance was adequate and provided accurate and timely information throughout the implementation period (ICR, paragraph 58). Financial reporting was in line with the Ministry of Finance regulations and requirements of the Loan Agreement. FM benefited from regular guidance, training, and support by the Bank. According to the ICR (paragraph 58) "all project audit reports came with unqualified audit opinion."

Procurement. The project followed procurement procedures and complied with the Bank's guidelines (ICR, paragraph 59). Procurement mitigation measures were implemented, and no significant procurement issues were noted throughout implementation (ICR, paragraph 59).

c. Unintended impacts (Positive or Negative)

None.

d. Other

The ICR notes that the project demonstrated "building a foundation for rural revitalization". The project interventions and cooperatives' businesses created many job opportunities for young people to work close to home, which increased their household income, enabled them to take care of their families (that is, left-behind children and aged family members), and also built (young) local human resource for rural development (ICR, paragraph 48).

11. Ratings

Ratings	ICR	IEG	Reason for Disagreements/Comment
Outcome	Satisfactory	Satisfactory	
Bank Performance	Satisfactory	Satisfactory	
Quality of M&E	Substantial	Substantial	
Quality of ICR	---	Substantial	



12. Lessons

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

1. The METT proved to be a useful instrument to systematically assess the cooperatives' in order to establish professional farmer institutions. Building professional farmer institutions takes time and concerted efforts including capacity building and business development plans duly supported by technical and advisory services. The METT allows targeted guidance and support to farmer institutions for improving capacity. This needs to proceed at a pace and in a manner according to the knowledge/skills base and absorptive capacity of the target group which is often overestimated.

2. Improving public infrastructure and services not only enhanced local connectivity and mobility, but also achieved economies of scale; and reduced production and transport costs. Farmer cooperatives benefitted from the improved infrastructure and support services provided by the provincial governments to complement the project investments. Improved roads, irrigation and drainage, internet, utilities, quality testing and certification facilities, and extension services improved local farmers' and cooperatives' mobility, product processing and value addition, and access to input and output markets; and reduced pre- and post-harvest losses.

3. Effective links to markets is a critical element to ensure sustainable business success. Through developing the entire value chain and establishing successful market connections, the cooperatives were able to sell their products at better prices in the niche domestic and international markets and earn higher profits. There are several key ingredients to this success including: business contracts with the private sector to invest in their value chains; registration of the trademark/brand name as a mark of high quality and recognition of the product; quality certification, that is, green product and organic product; and the use of all avenues (traditional wholesale markets, direct sales to supermarkets and businesses, and e-commerce channels) to access local, regional, national, international, and niche markets.

13. Assessment Recommended?

No

14. Comments on Quality of ICR

Quality of Evidence. The ICR relied on the M&E data to assess the project outcomes. Overall, the quality of M&E data was adequate.

Quality of Analysis. The ICR provided a clear linkage between evidence and findings and used the evidence base to serve the arguments under the different sections, particularly the discussion on outcomes.



Lessons. Lessons reflected the project experience and were based on evidence and analysis.

Results Orientation. The ICR included a comprehensive discussion on the achievement of the PDO. The outcome discussion was well balanced between what the project achieved on the ground and the achievement of outcome indicators.

Consistency with guidelines. The ICR used the available data to justify most of the assigned ratings. The ICR did not report why a split rating was not applied even though the PDO outcome indicators were revised.

Conciseness. The ICR provided a thorough yet concise coverage of project activities, and candidly reported on shortcomings. However, the ICR did not elaborate on the best practices that were scaled up.

Summary of the Quality of ICR Assessment. The ICR was well written. It used the available M&E data to discuss the project achievements. The discussion on the achievement of outcomes was detailed, and the ICR reflected relevant lessons. Reporting on M&E could have benefited from further details. Overall, the Quality of the ICR is rated Substantial with minor shortcomings.

a. Quality of ICR Rating
Substantial