Report Number: ICRR0024655

1. Project Data

Project ID	Project Name
P158798	JOHAR
Country	**Practice Area(Lead)**
India	Agriculture and Food

L/C/TF Number(s)	Closing Date (Original)	Total Project Cost (USD)
IBRD-87570	30-Jun-2023	76,917,734.97
Bank Approval Date	**Closing Date (Actual)**	
26-May-2017	30-Jun-2024	

	IBRD/IDA (USD)	Grants (USD)
Original Commitment	100,000,000.00	0.00
Revised Commitment	78,470,000.00	0.00
Actual	76,067,649.86	0.00

Prepared by	Reviewed by	ICR Review Coordinator	Group
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2. Project Objectives and Components

a. Objectives

The Project Development Objective (PDO) of the Jharkhand Opportunities For Harnessing Rural Growth Project (JOHAR) as articulated in the Loan Agreement (LA, page 6) was identical to the one stated in the Project Appraisal Document (PAD, paragraph 16) and aimed to:

"Enhance and diversify household income in select farm and non-farm sectors* for targeted beneficiaries in project areas."

Parsing the PDO. The PDO will be parsed based on the following two Objectives:

1. To enhance household income in select farm and non-farm sectors for targeted beneficiaries in project areas.

2. To diversify household income in select farm and non-farm sectors for targeted beneficiaries in project areas.

The above-mentioned two objectives were closely interlinked, with each reinforcing the others to achieve the PDO. For example, productivity gains from new technologies and irrigation improvements were expected to contribute to higher yields with better quality, which in turn would result in a surplus that would benefit from better market access through improved bargaining power by FPOs. Also, the project team explained that "the project envisaged that each household would be supported through at least two activities to promote diversification away from paddy into high-value agriculture (HVA), livestock, fisheries, Non-Timber Forest Produce (NTFPs), and other sectors, thereby increasing overall incomes. The mix and scale of livelihood interventions (e.g., combining HVA with livestock/NTFPs, or fisheries with livestock) were designed to achieve both income enhancement and diversification."

*In a further communication, the project team explained that the non-farm sectors that benefited from project support included: "(a) livestock (goat rearing, pig rearing, backyard poultry, broiler and layer poultry); (b) freshwater fisheries; and (c) non-timber forestry-based livelihoods."

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?

Yes

d. Components

The PDO was supported by the following three components:

1. Diversified and Resilient Production and Value Addition (appraisal cost estimate: US$110.62 million of which US$77.40 million from IBRD, actual cost: US$98.70 million of which US$68.90 million from IBRD). This component aimed to support collectives of small producers and interventions for diversification, intensification and value-addition in the selected sub-sectors of HVA, livestock, NTFP, fisheries and irrigation. It also included the provision of sub-grants to Producer Groups (PGs). It was comprised of six sub-components: 1.1 Rural Producer Collectives; 1.2 HVA Development; 1.3 Livestock Development; 1.4 Fisheries Development; 1.5 NTFP Development; and 1.6 Irrigation System Development (for HVA production).

2. Promoting Market Access, Skill Development and Pro-Poor Finance Systems (appraisal cost: US$13.36 million of which US$9.30 million from IBRD, actual cost: US$7.00 million of which US$3.60 million from IBRD). This component aimed to promote market access and private sector participation,

foster skill development relevant to the focus value chains, and facilitate the development of pro-poor agricultural finance systems. Interventions provided market information, supported Producer Organizations (POs) business plan development and private sector linkages, and provided skills training for community cadre, entrepreneurs and producers and sub-grants to farmer producer organizations (FPOs) for operation and investments. It was comprised of three sub-components: 2.1. Market Access and Private Sector Participation; 2.2. Skills, Jobs and Enterprise Development; and 2.3. Pro-Poor Agricultural Finance Systems.

3. Project and Knowledge Management (appraisal cost: US$18.77 million of which US$13.00 million from IBRD, actual cost: US$6.30 million of which US$4.40 million from IBRD). This component aimed to ensure project and knowledge management, and it supported activities establishing project management and knowledge management.

Revised Components. The first restructuring introduced a new sub-component under component 1: Sub-grants to Village Organizations, Self-Help Groups and Cluster Level Federations (CLFs)". The sub-component was expected to bridge the gap in community investment available for SHGs, particularly in the context of pandemic relief and recovery, to provide them with a strong foundation of savings and credit for undertaking productive activities as PG members.

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

Project Cost. The total project cost was estimated at US$143.00 million. The actual cost according to the ICR Data Sheet (page ii) was 76.92 million. The difference stemmed from a downward revision of the World Bank financing and the borrower contribution (see below).

Financing. The project was financed through an IBRD loan worth US$100.00 million. This was revised down during implementation to US$78.47 million. The actual amount disbursed was US$76.92 million (ICR Data Sheet, page 2). The project experienced an exchange rate gain of about 15% during the implementation period (ICR, Annex 4). In total US$21.52 million of the loan proceeds were cancelled (US$11.0 million at MTR, US$4.30 million in March 2023, and US$6.20 million in March 2024).

Borrower Contribution. The Government of Jharkhand was expected to contribute US$43.00 million. According to Annex 3 in the ICR, the Government contribution was US$33 million equivalent.

Dates. The project was approved on May 26, 2017 and became effective about three months later on September 4, 2017. The Mid-Term Review was conducted on November 17, 2020 which was about a month earlier than the planned date on December 15, 2020. The MTR was timely conducted after three years and two months from effectiveness. The project closed on June 30, 2025 which was 12 months beyond the original closing date on June 30, 2024.

The project was restructured three times, all of which were Level 2 restructuring, as follows:

1. On January 28, 2021, when the amount disbursed was US$24.64 million, in order to introduce a new sub-component under component 1, revise the Results Framework as the Intermediate Result Indicator (IRI) (number of beneficiaries reached with financial services) under component 2 was dropped and replaced by two new indicators, targets were revised down for the number of irrigation schemes from 2,080 schemes to 1,310 schemes; and the target for the area

under irrigation from 18,000 ha to 5,900 ha, also US$11.00 million of the Loan proceeds were cancelled based on exchange rate savings. In a further communication, the project team explained that "the target for irrigation schemes was reduced as there were considerable delays in the procurement of agencies for the implementation of irrigation schemes and the delays associated with setting up of the technical committee by the Government of Jharkhand for clearing the Detailed Project Reports (DPR) of the irrigation packages."

2. On May 11, 2023, when the amount disbursed was US$71.50 million, in order to cancel US$4.32 million of the Loan proceeds reflecting exchange rate and project management savings, extend the project closing date by 12 months from June 30, 2024 to June 30, 2025 in order to "provide time for completing the pending 635 minor irrigation schemes and supporting communities in managing infrastructure during early cropping seasons (ICR, paragraph 17)", reallocate funds between components based on higher cost estimates for component 1 and reduced cost estimates for components 2, and revise the RF.

3. On May 9, 2024, when the amount disbursed was US$75.82 million, in order to cancel US$6.2 million from all three components due to a slowdown in procedural activities within the state administration.

This Review will assess the outcome of the project based a split rating methodology because the level of ambition in the outcome targets (see above) was reduced in relation to changes in income and diversification of incomes.

3. Relevance of Objectives

Rationale

Context at Appraisal. At appraisal, Jharkhand was among the poorest states in India with a per capita income below the national average and higher than only five other states. The state lacked effective administration, financial inclusion, and service delivery which further marginalized its tribal populations. Of its 33 million population, 70% lived in rural areas and 37% were below the poverty line. Majority of the women in rural Jharkhand work in agriculture, livestock and forestry activities and do major part of the work. This project focused on empowering rural women via three-tiered community institutions to promote credit access, capacity building, and market-driven agricultural and non-farm livelihoods, marking a significant step toward inclusive rural development in a difficult socio-political environment.

Previous World Bank (WB) Experience. The World Bank's (WB) engagement in Jharkhand through the National Rural Livelihoods Project (NRLP) built a strong institutional platform of women's self-help groups which would serve this project. The design of this project builds on the experiences and key lessons gained from previous WB-funded projects and analytical work in rural livelihoods, agriculture competitiveness, community-based forestry, and watershed management in India as well in other countries. Overall, the WB was on a strong foundation to design and oversee the implementation of this project.

Consistency with WB Strategies. At appraisal, the PDO was in line with the WB Country Partnership Strategy for India (CPS, FY2013–FY2017). Specifically, the project would contribute to two of the main engagement areas under the CPS, namely, transformation and inclusion. Under transformation, the project would enhance agricultural incomes through increased productivity, improved market linkages and value

addition; supported by strengthening extension services and improving access to credit; with a focus on sustainable natural resource management and appropriate technology. Under inclusion, the project would contribute to economic integration and enhancing rural livelihood opportunities of the most disadvantaged groups including women. The project would also support climate-resilient agriculture, agricultural markets, water and natural resources management (CPS outcome 2.4). Additionally, the project would support enhancement of rural livelihood opportunities through encouraging diversification, lowering production costs, strengthening market linkages, skill development and self-employment (CPS outcome 3.6), and increased access to financial services (CPS outcome 3.7).

At completion, the PDO continued to be in line with the WB Country Partnership Framework for India (CPF, FY2018-FY2022). Specifically, the project contributed to two focus areas: promoting resource-efficient growth and enhancing competitiveness and enabling job creation. The project contributed to objective 1.1: to promote more resource-efficient, inclusive, and diversified growth. Also, the project contributed objective 2.4: to increase access to market-relevant skills development; and objective 2.5: to enable more quality jobs for women. Finally, the PDO also was in line with the CPF's "catalytic how's of engagement", specifically, engaging a federal India by identifying entry points and change levers at various levels of India's federal system to target catalytic contributions, including strategic partnerships with select states.

Consistency withe the Government Strategies/Priorities. At appraisal, the PDO was in line with goals of India's National Policy for Farmers (2007) that included increasing net income of farmers, conserving natural resources for sustained agriculture growth, developing agriculture support services, managing risk, as well as enhancing opportunities for farm and non-farm skills and employment. The PDO was also in line with the focus areas for agriculture outlined in India's 12th Five Year Plan (2013–2017) namely, bringing scale through development of POs, initiating a shift towards sustainable and climate-resilient agriculture, and preparing for faster growth through more diversified agriculture.

At completion, the PDO continued to be in line with national and state priorities including enhancing agricultural production, financial inclusion, rural livelihoods, and social inclusion. The project's relevance to the Government of Jharkhand and the Government of India was emphasized through its inclusive outreach, targeting women and SC/STs, promoting women FPOs, high levels of financial inclusion (i.e. bank credit to FPOs), and direct investments in irrigation, HVA, livestock, and diversified livelihoods for farmers.

Summary of Relevance of Objectives Assessment. While the PDO statement was clear and focused, it could have benefited from a connection to poverty. The PDO was pitched at higher level of ambition in relation to conditions on the ground. At completion, the PDO continued to be in line with the WB strategy in place as well as with national and state priorities as noted above.

On balance, the Relevance of Objectives is rated High.

Rating
High

4. Achievement of Objectives (Efficacy)

OBJECTIVE 1

Objective

To enhance household income in select farm and non-farm sectors for targeted beneficiaries in project areas.

Rationale

Theory of Change (ToC). To achieve the outcome of enhancing household income in select farm and non-farm sectors for targeted beneficiaries in project areas, the project would mobilize rural producers (the majority of whom were women Self Help Groups-SHG- members, including from Scheduled Castes/Scheduled Tribes- SC/ST- and smallholder households) into producer groups (PGs) and further federate those into Farmer Producer Organizations (FPOs). This arrangement would better support their linkages to input and output markets, and with financial institutions. Through economies of scale, this was expected to improve producers' access to high quality inputs at lower costs, enhance opportunities for value addition, improve access to higher remunerative markets, improve bargaining power to receive higher prices, and increase access to credit to invest in higher-value production systems. The project also promoted improved skills and knowledge interventions to support farmers. The following outputs were expected as a result of the supported activities: increased availability of inputs at reduced prices and improved quality, improved market access, increased availability and access to credit, and improved farmer knowledge and skills. These outputs were expected to contribute to the following intermediate outcomes: higher crop prices and improved quality of agricultural products, and changes in production decisions as reflected in increased intensification and diversification. This would contribute to two main outcomes: increased production with improved quality, and increased sales revenue. The causal links from inputs to outcomes were direct, such that reported results could be attributed to the project. The planned activities were adequate and could be expected to contribute to the achievement of the PDO if implemented successfully. However, the causal links to increased production could have benefited from further development. Also, the inclusion of specific outcome/intermediate outcome indicators to measure the impact of the project activities on increasing production would have strengthened attribution.

The achievement of the PDO was underpinned by the following six critical assumptions: 1. Department of Rural Development (DORD) and the Jharkhand State Livelihood Promotion Society (JLSPS) provide sustained leadership, and address synergies across social inclusion, agriculture and water management; 2. Communities see value in farming and sustain institutions; 3. JOHAR PMU is fully established with required human resources; 3. District, block and cluster functionaries are interested in the project; 4. PGs/POs/FPOs see value in improved production plans and implement them in timely manner; 5. PMU collaborates with technical partners in timely and sustained manner; and 6. Private sector is interested in providing value chain support in tribal blocks. The stated assumptions were logical and realistic.

Outputs/Intermediate Results

- 21 FPOs were formed with 138,290 shareholder (no target specified). These FPOs focused on multiple commodities for year-round business and strong bargaining power. These 21 FPOs transacted with over 125,000 households, establishing 35 Rural Business Hubs (RBHs), 28 livestock service enters, and 138 Custom Hiring Centers. The Custom Hiring Centers, managed via a custom app, facilitated over 45,000 machinery orders, serving 20,000 households. The combined FPO revenue US$26.9 million by FY 2023-24, with an annual growth of 18% (ICR, paragraph 27). The

FPOs also provided market access for NTFP products and helped market 50,000 tons of lac, 1600 liters of lemon grass oil, and 170 tons of tamarind (ICR, paragraph 28).

- 19 FPOs had their credit linked with Banks with a total value of credit linked available with FPOs reaching INR 59.9 million (no target specified).
- 224,215 farmer adopted an improved agricultural technology promoted by the project exceeding the original end target of 160,000 (target exceeded). This included: 155,587 farmers adopting HVA, 17,343 adopting fishery, and 51,28 adopting livestock technologies.
- 9,218 hectares (Ha) were provided with irrigation or drainage services which was below the original end target of 18,000 ha (target not achieved).
- By project completion, the average dietary diversity score in target households reached 9.07% substantially achieving the target of 10%.
- By project completion, 90% of project-supported Producer Organizations were assessed as viable exceeding the original end target of 50% (target exceeded).
- By project completion, 85% of Producer Groups were assessed as Grade A and B exceeding the original end target of 60% (target exceeded).
- By project completion, the increase in the sale volume of select HVA crops of targeted households reached 1,130% significantly exceeding the original target of 50% (target exceeded).
- By project completion, the increase in the sale volume of select livestock produce reached 114% exceeding the revised end target of 30% (target exceeded).
- 21% of total production sold by targeted households was through producer collectives which was below the original end target of 50% (target not achieved).
- 90% of POs were linked with formal financial services exceeding the original end target of 30% (target exceeded).
- 92,080 of targeted JOHAR households had access to community finance for intensification of agriculture and allied activities exceeding the original end target of 40,000 households (target exceeded).
- 2,174 entrepreneurs were trained which was below the original end target of 3,000 (target not achieved).
- 7 private sector partnerships were operationalized exceeding the original end target of 3 (target exceeded).
- 16,755 community service providers were trained and providing their services which was below the original end target of 110,000 (target not achieved).

Outcomes

- By project completion, the total number of project beneficiaries that belong to SC/ST categories reached 356,905 exceeding the original target of 100,000, and the number of female project beneficiaries that belong to SC/ST categories reached 355,414 exceeding the original target of 70,000 (both outcome targets exceeded).
- By project completion, the average annual household income (real) of the targeted households increased by 35% which was below the end target of 50% (PDO Outcome Indicate #1, target not achieved).

Summary of Efficacy Assessment. While the project had notable achievements, results were mixed as there were some weaknesses. The evidence provided in the ICR (table 2 and paragraph 21) point to the success of the project in enhancing household income for project beneficiaries. Specifically, endline data for

HVA households showed a mean annual income of INR 137,838 in treatment areas versus INR 121,099 in external control areas; livestock households showed INR 125,843 compared to INR 95,782, respectively. Combined, average annual incomes for HVA and livestock were INR 134,864 in treatment areas and INR 114,823 in control areas, up from INR 66,615 and INR 72,607 at baseline. However, the project fell short of achieving its targets for four intermediate results indicators as noted above. Also, the project fell short of achieving its target for one of its PDO outcome indicators. On balance, the efficacy of the project in achieving this Objective is rated Substantial with moderate shortcomings.

Rating
Substantial

OBJECTIVE 1 REVISION 1
Revised Objective
To enhance household income in select farm and non-farm sectors for targeted beneficiaries in project areas.

Revised Rationale
Theory of Change (ToC). The same ToC under the original objective still applied since the PDO was not revised. As part of the first restructuring on (January 28, 2021) the end targets for one PDO outcome indicator (Percent increase in average annual household income (real) of the targeted households) was reduced from 50% to 30%. Also, the targets for some IRIs were revised down as follows: the number of irrigation schemes from 2,080 schemes to 1,310 schemes; and the target for area under irrigation from 18,000 ha to 5,900 ha, the percent increase in the sale volume of select HVA crops of targeted households was revised down from 50% to 30%, the percent increase in the sale volume of select livestock produce was revised down from 50% to 30%, the proportion of total production sold by targeted households through producer collectives was revised down from 50% to 20%, the number of entrepreneurs trained was revised down from 3,000 to 2,000.

The same critical assumptions applied.

Outputs/Intermediate Results

The indicators against the original targets still apply. Shown below are the indicators with revised targets only.

- 9,218 hectares (Ha) were provided with irrigation or drainage services exceeding the revised target of 5,900 ha (target exceeded).
- By project completion, 85% of Producer Groups were assessed as Grade A and B exceeding the original end target of 60% (target exceeded). This indicator was modified to include Grade B as well.
- By project completion, the increase in the sale volume of select livestock produce reached 114% exceeding the revised end target of 30% (target exceeded).
- 21% of total production sold by targeted households was through producer collectives which slightly exceeded the revised target of 20% (target exceeded).
- 2,174 entrepreneurs were trained which exceeded the revised end target of 2,000 (target exceeded).
- 16,755 community service providers were trained and providing their services which exceeded the revised end target of 7,000 (target exceeded).

Outcomes

Shown below is the outcome indicator with revised target only.

- By project completion, the average annual household income (real) of the targeted households increased by 35% which exceeded the revised end target of 30% (PDO Outcome Indicate #1, target exceeded).

Summary of Efficacy Assessment. The evidence provided in the ICR (table 2 and paragraph 21) pointed to the success of the project in enhancing household income for project beneficiaries as noted above. The project fully achieved or in some cases exceeded its revised targets for all of its intermediate results indicators as noted above. Also, the original target for beneficiaries including females and the revised target for average annual household income were both exceeded.

Therefore, the efficacy of the project in achieving this Objective is rated High.

Revised Rating
High

OBJECTIVE 2
Objective
To diversify household income in select farm and non-farm sectors for targeted beneficiaries in project areas.

Rationale
Theory of Change (ToC). To achieve the outcome of diversifying household income in select farm and non-farm sectors, the project would mobilize rural producers (the majority of whom are women SHG members, including from SC/ST and smallholder households) into producer groups (PGs) and further federated into Farmer Producer Organizations (FPO), which would support their linkages to input and output markets and with financial institutions. The project would also provide financing by capitalizing the community institutional platforms (SHG, PGs and FPOs) to support diversification, intensification and value-addition in the selected sub-sectors of HVA, livestock, NTFP, fisheries and irrigation. Through economies of scale, this would then improve producers' access to high quality inputs at lower costs, enhance opportunities for value addition, improve access to higher remunerative markets, improve bargaining power to receive higher prices, and increase access to credit to invest in higher-value production systems. The project promoted improved skills and knowledge interventions to support farmers. The following outputs were expected as a result of the supported activities: PGs/FPOs formed and trained, community center HVA, livestock, and fishery production plans established, community irrigation plans prepared and water user groups trained, micro irrigation schemes operational and training provided for community members to conduct O&M operations. These outputs would contribute to the following intermediate outcomes: increased availability of inputs at reduced prices and improved quality, women focused PGs/FPOs adopt climate-smart agriculture technologies and practices, improved market access, increase availability and access to credit, and improved farmer knowledge and skills. Through the successful implementation of the project activities and the delivery of the afore-mentioned outputs/intermediate outcomes, changes in production decisions were expected to happen as reflected in increased intensification and diversification. All this would contribute to diversifying household income in select farm and non-farm sectors. The causal links from inputs to

outcomes were direct, such that reported results could be attributed to the project. The planned activities were adequate and could be expected to contribute to the achievement of the PDO if implemented successfully.

The same critical assumptions under the original Objective 1 apply.

Outputs/Intermediate Results

- 21 FPOs were formed with 138,290 shareholder (no target specified). These FPOs focused on multiple commodities for year-round business and strong bargaining power. These 21 FPOs transacted with over 125,000 households, establishing 35 Rural Business Hubs (RBHs), 28 livestock service enters, and 138 Custom Hiring Centers. The Custom Hiring Centers, managed via a custom app, facilitated over 45,000 machinery orders, serving 20,000 households. The combined FPO revenue US$26.9 million by FY 2023-24, with an annual growth of 18% (ICR, paragraph 27). The FPOs also provided market access for Non-Timber Forest Produce (NTFP) products and helped market 50,000 tons of lac, 1600 liters of lemon grass oil, and 170 tons of tamarind (ICR, paragraph 28).
- 224,215 farmer adopted an improved agricultural technology promoted by the project exceeding the original end target of 160,000 (target exceeded). This included: 155,587 farmers adopting HVA, 17,343 adopting fishery, and 51,28 adopting livestock technologies.
- 9,218 hectares (Ha) were provided with irrigation or drainage services which was below the original end target of 18,000 ha (target not achieved).
- 1,310 irrigation schemes were supported by the project which was below the original end target of 2,080 schemes (target not achieved).
- 61,949 HHs had access to irrigation.
- 574 Poly house nursery were set up under the project.
- By project completion, the increase in the sale volume of select HVA crops of targeted households reached 1,130% significantly exceeding the original target of 50% (target exceeded).
- By project completion, the increase in the sale volume of select livestock produce reached 114% exceeding the revised end target of 30% (target exceeded).
- 21% of total production sold by targeted households was through producer collectives which was below the original end target of 50% (target not achieved).
- 90% of of POs were linked with formal financial services exceeding the original end target of 30% (target exceeded).
- 92,080 of targeted JOHAR households had access to community finance for intensification of agriculture and allied activities exceeding the original end target of 40,000 households (target exceeded).
- 2,174 entrepreneurs were trained which was below the original end target of 3,000 (target not achieved).
- 7 private sector partnerships were operationalized exceeding the original end target of 3 (target exceeded).
- 16,755 community service providers were trained and providing their services which was below the original end target of 110,000 (target not achieved).
- Notable achievements not directly captured by the RF included: 2,722 HVA PGs were supported by a cadre of 3,129 Ajeevika
  Krishi Mitras (AKMs) and senior AKMs, HVA PGs managed 20,800 ha under HVA in the kharif season

and 16,618 ha in rabi. Also, the FPOs provided market access for NTFP products and helped market 50,000 tons of lac, 1600 liters of lemon grass oil, and 170 tons of tamarind. In 13 JOHAR FPOs, approximately 50% of payments were now digital, with cash transactions reduced to 5%. Digital payments were expected to accelerate the working capital rotation for FPOs.

Outcomes

- By project completion, the increase in the proportion of income (real) from select livelihoods sources increased by 4,277% exceeding the original end target of 70% (PDO Outcome Indicate #2, target exceeded). The ICR (Annex 1) reported that the proportion of income from HVA (as a share of agri/allied income) increased from 0.2% to 11.7% (equal to a 5,537% increase), and proportion of income from livestock increased from 3.8% to 14.8% (equal to a 457% increase). The aggregated percentage increase in proportion of income from HVA and livestock was 4,277.
- By project completion, a total of 687,230 farmers were reached with agricultural assets or services exceeding the original target of 200,000, and 684,814 female farmers were reached with agricultural assets or services exceeding the original target of 140,000 (both outcome targets exceeded).

Summary of Efficacy Assessment. The evidence provided in the ICR and the reported results point to the success of the project in contributing to diversifying household income in select farm and non-farm sectors. The project contributed to its diversification objective, as evidenced by the significant increase in the share of income from more diversified sources. The evidence reported in the ICR demonstrated that the project supported diversification towards HVA, livestock, fisheries, Non-Timber Forest Produce (NTFP). The impact assessment showed that 75% of project HHs reported incomes from more than one source, whereas only 59% of non-project HHs (control groups) reported income from more than one source. Further, the reported evidence suggested that the project led to diversification away from food grains (primarily paddy) towards crops in higher-value agriculture. At baseline, 96% of JOHAR HHs cultivated paddy over an average area of 1.6 acres. The impact assessment also showed that at endline 92% of HHs continued to cultivate paddy, but the average area decreased by 31% to 1.1 acres (ICR, paragraph 24). Also, the ICR (paragraph 26) reported that an assessment conducted by IFPRI in 2021 of 572 solar irrigation schemes showed a 55% increase in cropping intensity and production, with 19% adopting new crops and 35% reporting increased incomes (INR 20,000 per ha). While the project significantly exceeded its two PDO outcome targets, there were some shortcomings on its achievement of its intermediate outcome targets. Most notable, the project achieved only 51.5% of its original target for the area provided with irrigation or drainage services, fell short on achieving its target on the total production sold by targeted households through producer collectives, and fell short on achieving its targets for entrepreneurs trained and community service providers trained.

Therefore, the efficacy of the project in achieving this objective is rated Substantial with moderate shortcomings.

Rating
Substantial

OBJECTIVE 2 REVISION 1
Revised Objective

To diversify household income in select farm and non-farm sectors for targeted beneficiaries in project areas.

Revised Rationale

Theory of Change (ToC). The same ToC under the original objective still applied since the PDO was not revised. As part of the first restructuring on (January 28, 2021) the end targets for the PDO outcome indicator (Percent increase in the proportion of income (real) from select livelihoods sources) was reduced from 70% to 30%. Also, the targets for some IRIs were revised down as follows: the number of irrigation schemes from 2,080 schemes to 1,310 schemes; and the target for area under irrigation from 18,000 ha to 5,900 ha, the percent increase in the sale volume of select HVA crops of targeted households was revised down from 50% to 30%, the percent increase in the sale volume of select livestock produce was revised down from 50% to 30%, the proportion of total production sold by targeted households through producer collectives was revised down from 50% to 20%, the number of entrepreneurs trained was revised down from 3,000 to 2,000.

Outputs/Intermediate Results

The indicators against the original targets still apply. Shown below are the indicators with revised targets only.

- 9,218 hectares (Ha) were provided with irrigation or drainage services which exceeded the revised end target of 5,900 ha (target exceeded).
- 1,310 irrigation schemes were supported by the project fully achieving the revised end target of 1,310 schemes (target achieved).
- By project completion, the increase in the sale volume of select HVA crops of targeted households reached 1,130% significantly exceeding the revised target of 30% (target exceeded).
- By project completion, the increase in the sale volume of select livestock produce reached 114% exceeding the revised end target of 30% (target exceeded).
- 21% of total production sold by targeted households was through producer collectives slightly exceeding the revised end target of 20% (target exceeded).
- 2,174 entrepreneurs were trained which exceeded the revised end target of 2,000 (target exceeded).
- 16,755 community service providers were trained and providing their services which exceeded the revised end target of 7,000 (target exceeded).

Outcomes

Shown below is the outcome indicator with revised target only.

- By project completion, the increase in the proportion of income (real) from select livelihoods sources increased by 4,277% exceeding the revised end target of 30% (PDO Outcome Indicate #2, target exceeded). The ICR (Annex 1) reported that the proportion of income from HVA (as a share of agri/allied income) increased from 0.2% to 11.7% (equal to a 5,537% increase), and proportion of income from livestock increased from 3.8% to 14.8% (equal to a 457% increase). The aggregated percentage increase in proportion of income from HVA and livestock was 4,277.

Summary of Efficacy Assessment. The evidence provided in the ICR and the reported results point to the success of the project in contributing to diversifying household income in select farm and non-farm sectors. The project significantly exceeded its revised PDO outcome target and all the revised intermediate outcomes were either achieved or exceeded except for one indicator.

Therefore, the efficacy of the project in achieving this objective is rated High.

Revised Rating
High

OVERALL EFFICACY
Rationale
Overall Efficacy is rated Substantial with moderate shortcomings. For Objective 1, the project fell short of achieving its target for one of its PDO outcome indicators as well as several targets for its intermediate results indicators (IRIs). For Objective 2, while the project exceeded it PDO outcome targets, the project fell short of achieving its targets for a number of IRIs as noted above.

Overall Efficacy Rating

Substantial

OVERALL EFFICACY REVISION 1
Overall Efficacy Revision 1 Rationale
Overall Efficacy is rated High. For objective 1 the project exceeded its revised outcome target, and for objective 2 the revised outcome target was significantly exceeded. Also, most revised targets for IRIs were either fully achieved or exceeded.

Overall Efficacy Revision 1 Rating

High

5. Efficiency
Economic and Financial Analysis (EFA)

Ex-ante

- The economic internal rate of return (EIRR) of the project over a 20-year period for the base case, excluding benefits from greenhouse gas (GHG) emission reduction, was estimated at 26% with a net present value (NPV) of US$182.6 million at a discount rate of 12%.

- At appraisal it was estimated that: (a) a present average annual household income of INR 50,000; (b) an average annual inflation of 4.5%; and (c) an average annual real household income increase of 3% over the project period that would take place without the project; compared to a 50% increase in average annual real household income (over 4 years) of the targeted households over 4 years with the project support. However, the economic analysis was based on constant prices both for the benefits and the costs.
- A financial analysis was carried out for the main productive activities supported by the project. Detailed crop budgets were prepared for 13 crops and typical smallholder plot sizes, providing an overview of the production system including the key production parameters, farmer organizations, investments and marketing channels. The analysis provided the estimated incremental annual net income per household as well as the initial investment costs and the incremental annual costs of intermediate inputs under a with and without project scenarios.
- The results of a sensitivity analysis showed that a reduction in project benefits by 20% resulted in an EIRR of 21.9%. A 20% increase in project costs combined with a 20% reduction in project benefits, coupled to a two-year delay of benefits, reduced the EIRR to 13.5%. The EIRR would become 12% (including GHG benefits) if the average increase of annual real household income of targeted households was reduced from 50% to 17%.
- Overall, the EFA in the PAD was detailed and comprehensive. It provided a convincing argument to support the project investments.

Ex-ante

- The overall EIRR of the project over a 20-year period was estimated at 35.2% and a NPV of US$146.1 million at a discount rate of 12%. The EFA at completion largely followed the same approach at appraisal to ensure consistency and comparability.
- The average project cost per beneficiary household (PG members) amounted to US$494 compared to the target of US$1,135, which corresponded to about 43.5% of the cost per beneficiary household estimated at appraisal.
- A sensitivity analysis showed that even for an adverse situation of only 60% with project beneficiaries realizing 60% of incremental incomes the
EIRR was 14.6% which was still above the discount rate of 12%, and for a moderately adverse situation of 80% project beneficiaries realizing 60% of incremental incomes the EIRR is 25.1%. This demonstrated the robustness of the EIRR estimates.

Implementation/Administrative Efficiency. The project closed on June 30, 2025 which was 12 months beyond the original closing date on June 30, 2024. This delay was partially due to the COVID-19 disruption, which was beyond the project control. By the end of the project staffing dropped to 48% compared to to a high of 74% at MTR. The drop in the project staffing level was due to changes in the state government's hiring policies, and the addition of 101 new positions across the three project management levels. The project experienced an exchange rate gain of about 15% during the implementation period. The actual total project cost (US$112.0 million) represented about 64.2% of the project cost at appraisal. In total, US$21.5 million of Wb funding was cancelled (US$11.0 million at MTR, US$4.30 million in March 2023 and US$ 6.20 in March 2024) due to the exchange rate gains that the project experienced.

Summary of Efficiency Assessment. The EIRR at completion (35.2%) was higher than the one estimated at appraisal (26%). Also, the average project cost per beneficiary household (PG members) was about 43.5% of

the cost per beneficiary household estimated at appraisal. The project experienced a 12 month delay which was largely due to conditions beyond the project control.

Therefore, 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	✓	26.00	0 ☑ Not Applicable
ICR Estimate	✓	35.20	0 ☑ Not Applicable

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

6. Outcome

Pre-Restructuring

Relevance of objectives was rated High. Overall Efficacy was rated Substantial with moderate shortcomings. For Objective 1, the project fell short of achieving its target for its PDO outcome indicator as well as several targets for its intermediate results indicators (IRIs). For Objective 2, while the project exceeded it PDO outcome target, the project fell short of achieving its targets for a number of IRIs. Efficiency was rated Substantial as the EIRR at completion (35.2%) was higher than the one estimated at appraisal (26%).

Based on the assigned ratings for the three outcome criteria (i.e. Relevance of Objectives, Overall Efficacy, and Efficiency), Outcome is rated Moderately Satisfactory due to moderate shortcomings pertaining to the project's efficacy in achieving its objectives.

Post-Restructuring

Relevance of objectives was rated High. Overall Efficacy is rated High. For Objective 1, the project exceeded its revised outcome target, and for Objective 2 the revised outcome target was significantly exceeded. Also, most revised targets for IRIs were either fully achieved or exceeded. Efficiency was rated Substantial as the EIRR at completion (35.2%) was higher than the one estimated at appraisal (26%).

Based on the assigned ratings for the three outcome criteria (i.e. Relevance of Objectives, Overall Efficacy, and Efficiency), Outcome is rated Highly Satisfactory.

Split Rating. Based on the split rating methodology applied in the table below, the outcome of the project is rated Satisfactory.

	Pre-Restructuring	Post Restructuring
Relevance of Objectives	High	High
Overall Efficacy	Substantial with moderate shortcomings	Substantial
Efficiency	Substantial	High
Outcome	Moderately Satisfactory	Highly Satisfactory
Numerical Value of Outcome Rating	4	6
Disbursement (US$, millions)	26.64	52.06
Share of Disbursement	0.33	.67
Weighted Value of the Outcome Ratings	0.33 x 4 = 1.32	0.67 x 6 = 4.02
Final Outcome Rating	1.32+4.02 = 5.34 which rounds to 5 corresponding to a rating of Satisfactory on a 1 to 6 scale	

a. **Outcome Rating**
Satisfactory

7. Risk to Development Outcome

The following risks could potentially impact the Development Outcome:

1. Institutional risk. This relates to the risk that the PGs and FPOs would not get enough institutional support post completion. The grading of PGs and FPOs shows their continued strong performance and how they continue to mature with each business cycle. JSLPS, being an umbrella institution, is the parent organization for these community institutions and was able to leverage its own experience of PGs from projects like Mahila Kisan Sashaktikaran Pariyojana (MKSP) and the National Rural Livelihoods Project (NRLP). Going forward, it will be essential that JSLPS also supports the last-mile staff that have been engaging with them (beyond just the community institutions).

2. Technical risk. This risk relates to the continued operation of project investments post completion. The various monitoring applications used by the project were already under the M&E team of JSLPS, and these apps should now be integrated into JSLPS' M&E framework to ensure regular monitoring. JOHAR-supported irrigation structures were being managed by Water User Groups (WUGs), though they lack the tutelage of an umbrella institution. The WUGs had started collecting user fees to cover O&M needs. While these funds should be enough for normal maintenance, larger breakdowns may cause problems. JSLPS could support the WUGs by providing funding for these extraordinary maintenance operations.

3. Financial risk. This risk relates to the ability of FPOs to continue functioning post completion. Data on FPO operations shows that they firmly established their operations, with almost all being able to recover their

operations and HR costs. They also all have enough reserves and surplus to continue their operations going forward. Ensuring that FPOs continue to closely track funds utilization and comply with statutory requirements will be important for them to continue their business activities.

4. Stakeholder ownership risk. This risks relates to the relationship between PGs and FPOs. FPOs will need to ensure that the PGs continue to have a strong sense of connection with them. Despite the stellar performance of the FPOs, they have been able to transact with only around 50% of the PGs. It is important for FPOs to continue extending their reach to other PGs and deepen business transactions with existing PGs. The products should be brought under the umbrella of 'Palash', a state level brand created by JSLPS whose products are bestsellers across annual competitions and are selling online.

The following risk is emphasized by IEG:

5. Environmental risk. This risk relates to climate change and its impacts on the state of Johar. Climate data in Johar showed that from 2001 to 2010, drought conditions impacted five of the ten years. This necessitates that future projects reflect adequate climate change mitigation measures in their designs to alleviate the effects of climate change and ensure the sustainability of investments.

8. Assessment of Bank Performance

a. Quality-at-Entry

- **Strategic relevance and approach.** The project was strategically relevant and its PDO was in line with the WB strategy and the Government priorities (see Section 3 for details). Through this project, the WB sought to empower rural women and achieve an inclusive rural development in a difficult socio-political environment.
- **Technical, financial and economic aspects.** The project design reflected an ambitious and compound objective. The project design was complex and aimed to empower rural women via a three-tiered community institutions to promote credit access, capacity building, and market-driven agricultural and non-farm livelihoods. The project focused on achieving transformative increase in rural household incomes through
diversification and intensification of production systems across a range of sub-sectors. The project team conducted a series of interdepartmental and stakeholder consultations to inform the project design. However, the project faced HR challenges especially with field thematic coordinators of HVA activities. The PAD included a detailed EFA that justified the project investments.
- **Poverty, gender, and social development aspects.** The primary project beneficiaries were from rural households, the majority of whom were women SHG members, including from SC, ST, and smallholder and landless households in selected blocks of rural Jharkhand. The project design was geared towards empowering women with activities tailored specifically to rural women. The project's inclusion strategy positively contributed to improving rural incomes and potentially reducing poverty in the project areas.
- **Environmental and Fiduciary aspects.** The project design reflected adequate environmental aspects. However, procurement activities faced challenges. Specifically, the dissemination of financial literacy training content and a financial literacy toolkit for communities was hindered due to lack of government approvals for procurement of smart gadgets for communities.

- **Implementation arrangements.** The project was implemented under the JSLPS which was as an experienced institution that was implementing several other projects such as DAY-NRLM, NRETP, JICA's program on drip irrigation, among others. This enabled the project to achieve a smooth start as the intricacies of rural development in a tribal context and the diversified livelihoods of tribal households were well understood by the project team. Further, the project benefited from strong leadership at the highest levels of government which ensured the successful establishment of a fully staffed Project Management Unit (PMU) under JSLPS.
- **Risk assessment.** The overall risk rating for the project at the appraisal stage was rated Moderate. Technical design and institutional capacity risks were both rated substantial. The PAD reflected detailed mitigation measures to the identified risks. However, the disruption due to COVID-19 outbreak was unanticipated. Also, the challenges in hiring staff were overlooked.
- **M&E arrangements.** M&E was under JSLPS. The project aimed to strengthen the overall M&E capacity of the implementing agency by investing in technological infrastructure, capacity and evaluation systems. M&E design relied on a Randomized Control Trial-based impact evaluation right from the start. However, the RF could have benefited from including indicators that directly measured the impact of the project activities on agricultural production/yields.

Summary of Quality at Entry (QAE) Assessment. The project reflected a strategically relevant PDO. The project design featured relevant activities to achieve the stated objective. The design reflected adequate gender aspects that were geared to empower rural women. Environmental aspects were adequate, but under fiduciary there were procurement challenges. Implementation arrangements were adequate and the project benefited from an experienced implementing agency. Risk assessment identified two main risks and reflected relevant mitigation measures. However, the risk related to hiring staff was overlooked. Finally, M&E arrangements has some weaknesses pertaining to the RF.

Overall, QAE is rated Satisfactory.

Quality-at-Entry Rating
Satisfactory

b. Quality of supervision

- The project implementation experienced challenging environmental conditions due to climate change impacts and the outbreak of COVID-19 pandemic. The state faced frequent droughts which impacted agricultural productivity during the project cycle which negatively impacted the overall household incomes. Further, the lockdowns and mobility restrictions due to COVID-19 resulted in implementation delays. Finally, the project experienced three elections during its implementation, which according to the ICR (paragraph 46) "impacted ability to conduct outreach, engage with stakeholders/consult, and implement the project during those blocks of time."
- The WB conducted 15 implementation support missions over the course of the project implementation. The project implementation benefited from technical support provided directly though the WB expertise and mobilized from other development partners.
- The project supervision focused on tracking development objectives; ensuring strong fiduciary and safeguards oversight, maintaining close engagement through regular missions, virtual discussions,

and strategic meetings with state officials, enhancing project ownership; and leveraging domain experts for timely technical assistance.

- The project benefited from US$750,000 that were leveraged by the WB through a trust fund. This supported the WB's efforts through the implementation support phase in terms of hiring qualified technical specialists for operational support, conducting selective analytical studies (irrigation evaluation and gender assessment), policy research working papers, and knowledge exchanges.
- However, the Bank team could have put more effort to rectify M&E design weaknesses as part of the project restructuring.

Summary of Quality of Supervision Assessment. The WB team guided the project implementation through a challenging time. The team provided technical support directly though the WB expertise and through mobilizing expertise from other development partners. However, more attention should have been given to rectifying M&E design weaknesses.

On balance, the Quality of Supervision is rated Satisfactory.

Based on the QAE and Quality of Supervision ratings, the overall 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 ToC since it was not yet required by the WB at the time of appraisal. Nonetheless, the ICR included a ToC that reflected the relationship between the project activities, outputs, and outcomes. This Review outlined a ToC for each objective based on the detailed project description in the PAD and the ToC reported in the ICR (Annex 6).
- The achievement of the PDO was to be measured by four PDO outcome level indicators: 1. Percent increase in average annual household income (real) of the targeted households, 2. Percent increase in the proportion of income (real) from select livelihoods sources, 3. Number of project beneficiaries that belong to SC/ST categories including percent of female beneficiaries, and 4. Number of farmers reached with agricultural assets or services including the number of female farmers. The PDO outcome indicators were relevant and directly connected to the outcomes. The RF in the PAD reflected a detailed explanation of each indicator and noted that baselines would be recorded through an initial household survey. However, the targets for Outcome indicator #2 were set too low relative to the actual achievements at completion.
- The Results Framework (RF) included 17 intermediate results indictors (IRIs) to track the different project activities and assess the achievement towards realizing the PDO. Most IRIs were relevant, measurable and connected to the stated activities. However, the project M&E design could have benefited from indicators that measured the impact of the project on agricultural productivity (crop

yields, livestock, fisheries, and NTFPs) to strengthen the attribution of the project to the achieved outcomes.

- The M&E system was based on impact evaluation; process monitoring; and an MIS which enabled concurrent monitoring right from the start. The ICR (paragraph 48) noted that this project committed to a Randomized Control Trial-based impact evaluation right from the start. However, the rigid Randomized Control Trial design limited the assessment scope.
- Overall, M&E design was adequate and reflected well designed PDO outcome and intermediate outcome indicators. However, there were some weaknesses including low targets for Outcome indicators #2, and excluding fisheries and NFTP from household surveys.

b. M&E Implementation

- M&E implementation benefited from the strong foundations of the JSLPS M&E capacities and MIS platforms. Also, the selection of a technically qualified agency and the M&E agency was the first agency to be onboarded by the project, enabling an early start of M&E activities.
- The MIS system, developed in-house by JSLPS and complemented by third-party tools, enabled customized solutions for monitoring and managing livelihood activities, community resource persons (CRPs), and FPO operations. M&E implementation employed innovative strategies such as internal and external control groups for impact evaluation, ensuring flexibility to generate strong attributable results.
- While the baseline survey was completed within the first year, it could have been enhanced with additional modules to better capture the differential impacts of livelihood strategies and phased implementation (ICR, paragraph 49).
- Process monitoring studies identified bottlenecks, provided early insights into beneficiary impacts, and engaged independent third-party studies for validation.
- As part of the project restructuring, the targets for two PDO outcome indicator were reduced, one intermediate outcome indicator was dropped and replaced by two new IRIs, and the target from one IRI was reduced. These changes were relevant and aimed to adapt to changing situations on the ground and better align the RF with the implemented activities.
- Overall, M&E implementation was effective and generated enough data to measure the achievement of the PDO and track various project activities. However, the project could have adjusted the M&E system to better capture the project's impact due to the various livelihood activities promoted.

c. M&E Utilization

- The project used MIS for tracking progress and implementing course corrections, particularly for PGs, FPOs, and CRPs. Also, baseline and mid-term surveys helped monitor PDO indicators and informed project restructuring.
- The project applied new grading methods for PGs, FPOs, and CRPs which improved performance. In addition, eight process monitoring studies enabled key adjustments, such as synchronized crop planning, enhanced training for PG bookkeepers, and pilots for better FPO-PG business integration. The project applied remote water body monitoring which helped refined fisheries targets.

- Finally, M&E data and end-line surveys were utilized in assessing project outcomes in the ICR.

Summary of M&E Quality Assessment. M&E design was adequate and included a detailed RF that reflected relevant PDO outcome and intermediate outcome indicators. However, there were some weaknesses including low targets for Outcome indicators #2, and excluding fisheries and NFTP from household surveys. Also, the rigid Randomized Control Trial design limited the assessment scope. While M&E implementation was effective and generated enough data to measure the achievement of the PDO and track various project activities, the project could have benefited from assessments by third parties (e.g. IFPRI and FAO). Those assessments could have been more nuanced and increased the level of confidence on the attribution. Finally, M&E utilization was evident in guiding the project management and assessing achievements at completion as noted above.

On balance, M&E Quality is rated Substantial.

M&E Quality Rating
Substantial

10. Other Issues

a. Safeguards

- **Environmental Category and Safeguards.** This project was classified an environmental category 'B' (Partial Assessment) as the project interventions in production diversification and value addition were likely to have adverse environmental impacts if not executed and managed appropriately. The project triggered two World Bank environmental safeguard policies and one social safeguard policy: Environmental Assessment (OP/BP 4.01), Pest Management (OP 4.09), and Involuntary Resettlement (OP/BP 4.12). An Environment Assessment (EA) study based on which an Environment Management Framework (EMF) was developed to guide the project teams in avoidance and mitigation of negative impacts due to project interventions. Also, a Pest Management Plan (PMP) was prepared for the project. Finally, a Social Management Framework (SMF) was developed for the project including a Tribal Development Framework (TDF) and project strategies on social inclusion, consultation and participation, gender, citizen's engagement and left wing extremism (LWE) risk mitigation.
- **Compliance with the World Bank's safeguard policies.** The ICR (paragraph 52) reported that "the project maintained moderate environmental risk throughout and achieved a satisfactory performance rating, serving as a strong example of environmental safeguards integration for future initiatives." Also, "a Grievance Redress Mechanism (GRM) was developed and implemented, with overall social safeguard performance at project closure rated as Satisfactory (ICR, paragraph 53)."

b. Fiduciary Compliance

- **Financial Management (FM).** FM arrangements for the project were integrated within JSLPS systems. This ensured prompt quarterly Interim Unaudited Financial Report submissions. While

annual audit reports were submitted with delays in 4 out of 6 years, no major audit issues were identified. FM performance benefited from leveraging the banking sector technology and an MIS for fund tracking. FM performance was rated Moderately Satisfactory in the final ISR.

- **Procurement.** Procurement performance benefited from a well-staffed procurement team. This ensured smooth operations, effective management of complex consultancy procurements (e.g., MIS solutions, M&E) and utilization of innovative approaches like Framework. There were no non-compliance found in Post Procurement Reviews (ICR, paragraph 54). Procurement performance was rated Moderately Satisfactory in the final ISR.

c. Unintended impacts (Positive or Negative)

None.

d. Other

None.

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 six lessons. The following three are emphasized with some adaptation of language:

1. For complex projects like JOHAR, diverse M&E approaches are needed to capture a broader range of outcomes linked to the Theory of Change, allowing for an evaluation beyond the PDO metrics. The project experience showed that a flexible M&E framework enabled conducting timely mid-term reviews, adjust Intermediate Results Indicators, and effectively track PDO indicators. However, the rigid Randomized Control Trial design limited assessment scope. To further support the M&E, future projects could benefit from periodic assessments by third parties (e.g. IFPRI and FAO), which provide a more nuanced and increased confidence on the attribution.

2. To better document the impact of climate mitigation measures, M&E design need to include indicators that reflect the project's role in reducing climate-related setbacks. JOHAR's experience with unanticipated droughts underscores the need to design project indicators that account for climate risks. Even if an indicator does not register due to the lack of climate events, project interventions that mitigate negative impacts should be recognized as positive results. This can be achieved by setting climate-responsive targets or designing indicators that reflect the project's role in reducing climate-related setbacks.

3. To achieve sustainable agricultural diversification in irrigated areas, it is critical that projects support physical investments in irrigation systems. The project's experience demonstrated that small scale and community led irrigation could serve as a solution to climate resilience, boosting production and diversification. The project experience highlighted the benefits of small-scale, community-driven irrigation (over large-scale infrastructure) in regions like Jharkhand, which often face high environmental and financial barriers to large projects. By focusing on both asset provision and operation and maintenance (O&M) through water user groups (WUGs) and trained para-engineers, the project fostered youth engagement and ensured infrastructure longevity. The project overcame problems of small farm holdings, undulating terrain, and lack of large contiguous patches of land by targeting clusters of High Value Agriculture producer groups(PGs) and providing irrigation to PGs in close vicinity of Farmer Producer Organizations that had a higher propensity towards diversification.

13. Assessment Recommended?

No

14. Comments on Quality of ICR

- Quality of Evidence. The evidence base in the ICR was adequate and supported the assessment of the project outcomes.
- Results Orientation. The ICR used the available data to the extent possible to discuss the achievement of the PDO.
- Quality of Analysis. While the analysis of the project achievements was adequate, some areas could have received more attention including the impact of project activities on agricultural activities and yields to further strengthen attribution.
- Internal Consistency. Various parts of the ICR were internally consistent and logically linked and integrated.
- Lessons. Lessons reflected the project experience and were based on evidence and analysis.
- Consistency with guidelines. The ICR used the standard structure defined in the Guidelines and used available evidence to justify the assigned ratings.
- Conciseness. Overall, the ICR was well written and concise, and candidly reported on most shortcomings.

Summary of the Quality of ICR Assessment. The ICR provided a candid account of the project implementation experience. The assessment of outcomes was adequate. The lessons drawn by the ICR

were relevant. Most sections were concise and reflected relevant information. Overall, the Quality of the ICR is rated Substantial.

a. Quality of ICR Rating
Substantial