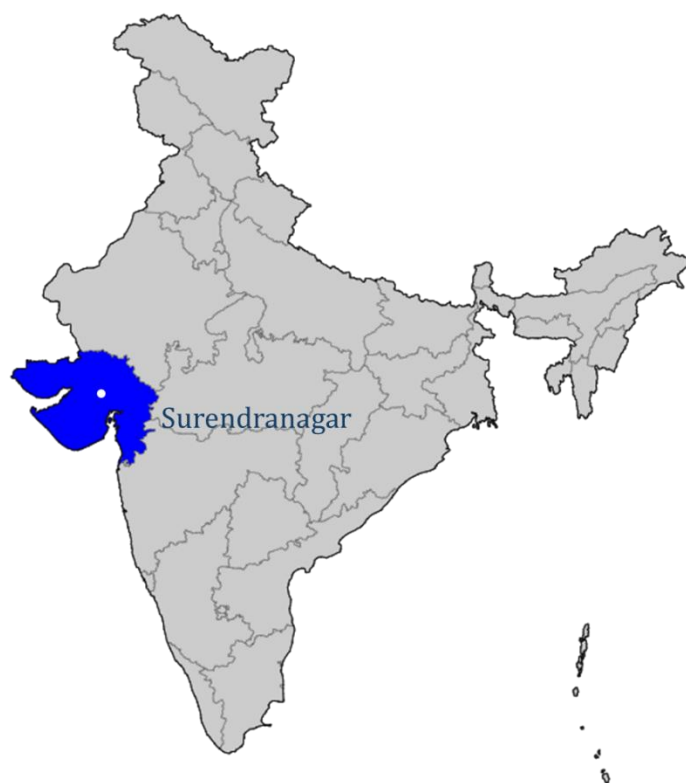




Impact Assessment Report

Focused Development Projects (FDP)- West Region (Cohort 2)

Aga Khan Rural Support Programme (AKRSP) P0518- Gujarat



February 2026



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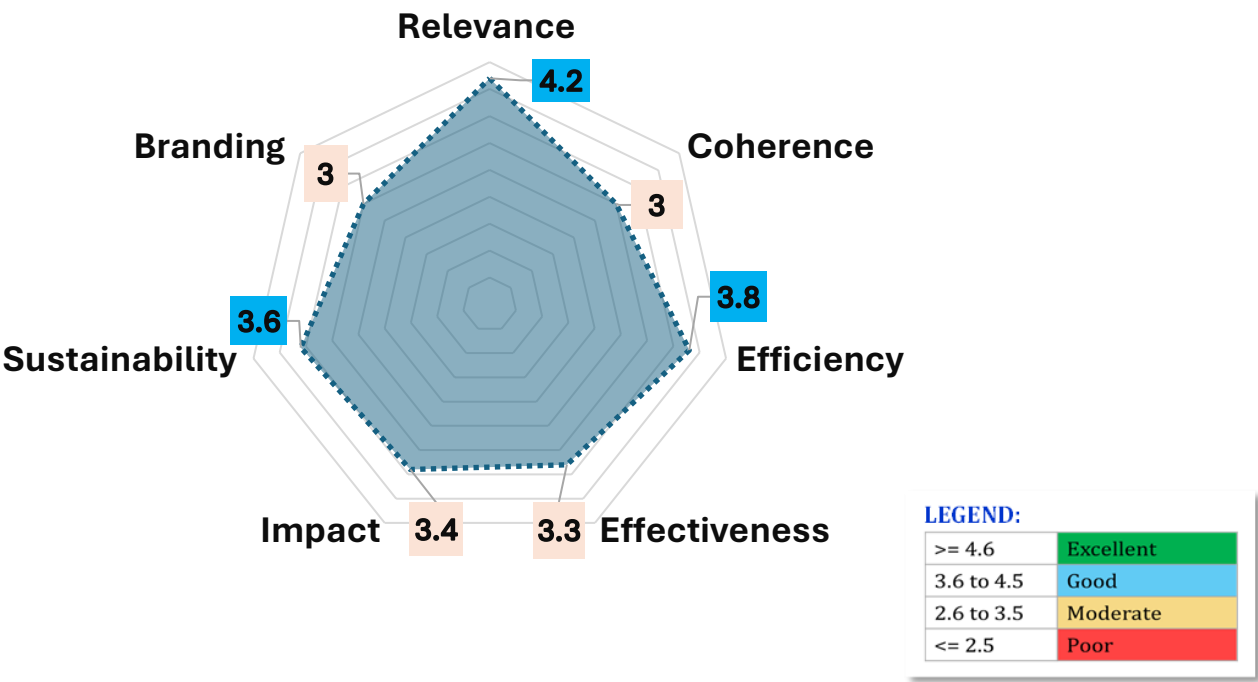
PROJECT LEVEL FINDINGS

P0518- AGA KHAN RURAL SUPPORT PROGRAM-
FOCUSED DEVELOPMENT PROGRAM

OVERALL PROJECT SCORE
Moderate

3.6

OECD Parameter-wise scoring



Findings by OECD criteria

<div>Relevance</div> <div>(Good)</div> <div>4.3</div>	<p><i>The quantitative survey indicated that 100% of the respondents viewed the interventions as high priority and considered the support essential. Regarding sufficiency, 96% of respondents found the interventions fairly adequate, while 4% rated them as extremely adequate.</i></p> <ul style="list-style-type: none">Context-Specific Response to Water Scarcity: Given that irrigation water in several villages is available only for limited months, investments in farm ponds, check dams, recharge structures, drip and rain pipe irrigation were highly relevant to the drought-prone ecology of Sayla.Strong Alignment with Local Livelihood Challenges: The intervention directly responded to persistent regional constraints, including low and unstable farm incomes, high dependence on rain-fed agriculture, saline groundwater, and climate variability. By strengthening irrigation access and promoting diversified and higher-value crops, the project addressed both income instability and production risks. <p>High relevance activities:</p> <ul style="list-style-type: none">Appropriate Focus on Soil Health and Natural Farming: In a region facing soil degradation due to excessive chemical fertilizer use, the promotion of
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	<p>natural farming practices, Jeevamrut preparation, and organic inputs was well aligned with long-term land productivity concerns.</p> <p>Low relevance activities:</p> <ul style="list-style-type: none"> • Recognition of Gender and Social Context: While strong gender barriers exist in the region, the project attempted to include women through training participation and VDC representation, acknowledging the need for inclusive development. However, the recognition of gender context was limited due to deep stemmed gender disparities in the region.
<p>Coherence</p> <p>(Moderate)</p> <p>3.0</p>	<ul style="list-style-type: none"> • Moderate Alignment with Government Systems: The project demonstrated convergence with institutions such as ATMA, KVK, and Panchayats, indicating efforts to align with existing agricultural extension and governance frameworks. However, the depth of integration with ongoing government schemes and long-term institutional embedding appears moderate rather than fully institutionalized. • Complementarity with Local Governance Structures: Panchayat NOCs and the formation of Village Development Committees (VDCs) supported procedural coherence. While this ensured community-level alignment, the long-term operational linkage between VDCs and formal governance mechanisms could be strengthened. • Limited Coordination with Other CSR Initiatives in the Same Geography: There was no structured coordination or platform-level engagement with other CSR programs operating in the same block, despite similar thematic focus areas such as water management and agriculture. The absence of cross-CSR convergence mechanisms increases the risk of duplication of efforts, overlapping beneficiary coverage, and sub-optimal utilization of resources, thereby limiting overall systemic coherence.
<p>Efficiency</p> <p>(Good)</p> <p>3.9</p>	<p>100% of the respondents reported that the interventions were implemented in a timely manner and the resources provided were of very good quality.</p> <ul style="list-style-type: none"> • Target-Driven Implementation Approach: The project largely operated as a target-achievement-based model, where emphasis was placed on completing planned numerical outputs (e.g., number of saplings planted, irrigation units installed, structures created). While this ensured high target fulfillment, careful selection of beneficiaries and contextual suitability of interventions were not always rigorously assessed. In some cases, activities were implemented to meet quantitative commitments rather than being strategically aligned with the most technically appropriate beneficiaries or agro-climatic conditions. This approach, although effective in achieving output, may have limited optimal resource utilization and long-term returns. • Limited Technical Input and Quality Assurance: Despite the presence of technical staff and agricultural expertise, quality control mechanisms were not always rigorously applied. Technical decision-making did not consistently override beneficiary preferences when agronomically unsuitable. • Lack of a Structured Delivery Framework: There was no clearly articulated tiered delivery structure for technical supervision, post-plantation monitoring, or performance benchmarking across villages. Stronger agronomic validation and follow-up mechanisms could have reduced inefficiencies.

<p>Effectiveness</p> <p>(Moderate)</p> <p>3.3</p>	<p>100% of the respondents believed that the interventions were implemented effectively.</p> <ul style="list-style-type: none"> • Achievement of Numerical Targets: The project largely met its planned output targets across irrigation, plantation, natural farming outreach, and NRM activities. From an output perspective, implementation was quantitatively successful. • Vendor-Based Delivery Model: A significant portion of activities was implemented through a vendor-based model, wherein vendors were hired for procurement and delivery of goods (e.g., irrigation systems, saplings) to beneficiaries. While this ensured timely target completion, it limited deeper engagement, capacity transfer, and adaptive handholding support. • Inconsistent Adaptation Over Time: Although natural farming was introduced systematically, over time farmers independently improvised methods (e.g., customized <i>Jeevamrut</i> recipes or shifting to ready-made bio-inputs due to time constraints). This indicates weak structured follow-up and limited technical reinforcement to maintain methodological consistency. • Tree Plantation Survival Concerns: Plantation activities met numeric targets; however, survival rates in certain horticulture components (e.g., lemon trees in saline water areas) were suboptimal. Climatic and soil suitability assessments were not consistently factored into plantation decisions, affecting long-term effectiveness.
<p>Impact</p> <p>(Moderate)</p> <p>3.5</p>	<p>100% of the respondents denoted that the interventions have led to significant improvements in crop yield and farm productivity, increase in farm incomes and profit, enhancement in household food security and reduction in input costs. However, 100% of the respondents were unsure about their ability to better respond to climate change or erratic weather.</p> <ul style="list-style-type: none"> • Increase in Household Income: The project contributed to an estimated 25–30% increase in farm income in several beneficiary households through reduced input costs, improved irrigation access, and enhanced productivity. Farmers reported higher net returns due to lower fertilizer and labour expenses combined with improved crop yields. • Improved Cropping Intensity and Output: Expansion of irrigation enabled farmers to cultivate larger areas during the Rabi season. In certain cases, agricultural output nearly doubled after irrigation support, demonstrating clear economic gains at the individual level. • Water Security Improvements: Desilting of ponds, recharge structures, and check dam renovation contributed to improved groundwater levels in some villages, leading to more stable agricultural production. • Individual Success Stories but Uneven Collective Transformation: While several farmers demonstrated strong individual-level improvements (e.g., cost reduction, productivity increase, irrigation expansion), transformational change was not uniformly experienced across all beneficiaries. The depth of impact varied depending on landholding size, water access, technical follow-up, and ecological conditions. • Moderate Institutional Impact: Formation of Village Development Committees strengthened community engagement; however, long-term institutional capacity and collective economic transformation remain evolving.

<p>Sustainability</p> <p>(Good)</p> <p>3.6</p>	<p><i>98% of the respondents stated that adequate measures were in place to sustain the activities even in the absence of the NGO/HDFC, while 2% stated that some measures were in place. 94% of the respondents reported that project activities were moderately functional in current times, while 6% reported that they were fully functional.</i></p> <ul style="list-style-type: none"> • Creation of Community Institutions: Village Development Committees (VDCs) were formed in each village and were involved in beneficiary selection, activity monitoring, and the formal handover process. This provides a basic institutional foundation for continuity beyond the project period. • Formal Handover to Community Structures: Assets created under the project (water structures, plantations, irrigation systems) were handed over to community institutions and Panchayats, indicating procedural closure and transfer of responsibility. • Community Contribution and Ownership: Beneficiary co-investment (e.g., contribution toward drip systems, transport of desilted soil) enhanced ownership and increases the likelihood of continued usage and maintenance of assets. • Dependence on Continued Technical Handholding: Natural farming methods were improvised individually by farmers over time, and some shifted to ready-made bio-inputs due to time constraints. This indicates that without structured technical reinforcement, practice quality and consistency may decline. • Ecological Vulnerability (Salinity and Climate Variability): High groundwater salinity, erratic rainfall, and limited irrigation duration (2–3 months in some areas) continue to pose structural risks to long-term agricultural sustainability.
<p>Branding</p> <p>(Moderate)</p> <p>3.0</p>	<ul style="list-style-type: none"> • Limited Physical Visibility in Project Areas: Branding and visibility of Aga Khan Trust at intervention sites were minimal. In several locations, boards were either absent or installed only at a few select sites, reducing the overall public recognition of the institution's contribution. • Poor Maintenance of Signage: In some villages where boards were installed, they were found to be tarnished, faded, or poorly maintained. This diminished the professional image of the organization and reduced long-term visibility impact. • Suboptimal Placement of Branding Materials: In certain cases, boards were not placed in prominent or high-footfall locations (e.g., near main roads, Panchayat offices, or central water structures), limiting awareness among non-beneficiary community members.

Analysis & Insights by Intervention Type

Intervention Type	Analysis/Insights
<p>Agriculture</p> 	<p>❖ Water Remains the Central Determinant of Agricultural Performance: Irrigation access was the single most transformative factor. Farmers who received drip systems were able to expand Rabi cultivation and increase productivity significantly. However, groundwater salinity and limited irrigation duration (2–3 months in some villages) remain structural constraints.</p>

	<ul style="list-style-type: none"> ❖ Irrigation Efficiency Directly Influences Income Stability: Drip irrigation reduced fertilizer use (in some cases from 4 bags to 1) and lowered labour costs substantially. Efficient water application improved crop health and yields, demonstrating that irrigation technology has both productivity and cost-efficiency implications. ❖ Natural Farming Adoption Was Pragmatic Rather Than Ideological: Farmers adopted natural farming practices initially on small plots (e.g., 1 bigha) and scaled up based on results. However, over time, some modified or replaced traditional preparations (e.g., Jeevamrut) with ready-made bio-inputs due to time constraints. This reflects adaptive but inconsistent adoption. ❖ Soil Health Is a Major Underlying Concern: Excessive historical use of chemical fertilizers has degraded soil quality. While natural farming interventions improved awareness, sustained soil regeneration requires long-term commitment and technical reinforcement. ❖ Crop Diversification Is Emerging but Not Fully Institutionalized: While diversification beyond cotton (e.g., vegetables, wheat, cumin) increased resilience, cropping patterns still largely depend on water availability and market signals rather than structured value chain planning.
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Key Impacts & Evidence of Change

- **Improved Irrigation Access and Water Use Efficiency:** Installation of drip and rain pipe irrigation systems enabled farmers to cultivate larger areas, particularly during the Rabi season. Improved irrigation scheduling reduced water wastage and ensured better crop growth, directly contributing to higher yields and more stable production.
- **Reduction in Input Costs and Optimised Resource Use:** Adoption of natural farming practices and efficient irrigation methods reduced fertilizer and labour costs significantly. In several cases, fertilizer usage declined from four bags to one, and labour expenses reduced substantially, improving net profitability.
- **Restoration of Degraded Land:** Desilting of ponds and application of fertile soil to barren land improved soil quality and converted previously unproductive plots into cultivable farmland. This enhanced land utilisation and increased overall agricultural output.
- **Behavioural Shift Toward Experimentation and Learning:** Farmers began experimenting with natural farming on small plots before scaling up, reflecting increased confidence and openness to improved agricultural methods.

Key Factors Influencing Performance

High Performance Drivers:	Low Performance Drivers:
<ul style="list-style-type: none"> • Strong Alignment with Core Local Need (Water): The project directly addressed the most critical constraint in the region—water scarcity. Investments in drip irrigation, farm ponds, recharge structures, and desilting created immediate and visible improvements in agricultural viability, driving strong uptake and results. 	<ul style="list-style-type: none"> • Target-Achievement Driven Implementation Model: A strong emphasis on achieving numerical targets sometimes overshadowed careful beneficiary selection and contextual suitability. Activities were completed to meet planned outputs, but strategic prioritisation of “who should receive what intervention” was not always rigorously assessed.

<ul style="list-style-type: none"> • Demand-Driven and Participatory Approach: Farmers were encouraged to pilot interventions (e.g., natural farming on 1 bigha) before scaling up. This reduced resistance, built confidence, and ensured that adoption was voluntary rather than imposed. 	<ul style="list-style-type: none"> • Vendor-Based Delivery Mechanism: Procurement and distribution of materials (e.g., drip systems, saplings) were largely vendor-driven. While this ensured timely delivery, it limited technical handholding, follow-up quality checks, and contextual customization at the farmer level.
<ul style="list-style-type: none"> • Demonstration-Based Learning (FFS & Exposure Visits): Farmer Field Schools, demo plots, and exposure visits created practical learning environments, improving understanding and encouraging replication of successful practices. 	<ul style="list-style-type: none"> • Limited Technical Oversight and Quality Assurance: Despite the presence of technical resources, structured agronomic supervision and quality assurance mechanisms were weak. For example, lemon plantations were promoted in areas with saline water conditions, which are not agronomically suitable, leading to survival challenges.
<ul style="list-style-type: none"> • Visible Economic Incentives: Reduction in fertilizer and labour costs, along with increased productivity, created immediate financial benefits. Clear economic returns motivated sustained engagement. 	<ul style="list-style-type: none"> • Inadequate Agro-Climatic Suitability Assessment: In some cases, farmer preference overrode scientific suitability (e.g., experimental plantations in unsuitable soil and water conditions), reflecting insufficient technical screening before implementation.
	<ul style="list-style-type: none"> • Poor Adaptation and Course Correction Over Time: While natural farming practices were introduced, farmers improvised methods independently without structured guidance. Plantation survival rates in certain areas were low, and systematic mid-course correction mechanisms were limited.
	<ul style="list-style-type: none"> • Limited Convergence with Other CSR Actors: Absence of coordination with other CSR initiatives operating in the same geography increased the risk of duplication and reduced opportunities for collective impact.

Best Practices worth Replicating

Integrated Water–Agriculture Model: Combining natural resource management (pond desilting, recharge structures, drip irrigation) with crop productivity interventions ensured that infrastructure translated into income gains. This integrated approach is highly replicable in other water-stressed regions.

Pilot-First Adoption Strategy: Encouraging farmers to test new practices (e.g., natural farming on 1 bigha) before scaling up reduced risk perception and increased voluntary adoption. This phased experimentation model builds confidence and improves sustainability.

Factors driving Performance, Sustainability, and Impact

Parameter	Enablers	Challenges
Performance	<p>Visible and Immediate Economic Returns: Reduction in fertilizer and labour costs, along with increased yield in irrigated plots, created quick financial gains. Tangible income improvements motivated continued farmer participation.</p> <p>Farmer Willingness to Experiment: Beneficiaries showed openness to piloting natural farming and diversification, which supported behavioral change and incremental innovation.</p> <p>Addressing a Critical Binding Constraint (Water Scarcity): By prioritising irrigation access and water conservation, the project tackled the primary productivity barrier in the region. Once water availability improved, other agricultural interventions became viable and impactful.</p>	<p>Limited Technical Supervision and Quality Assurance: Although technical resources were available, structured agronomic oversight and quality checks were not consistently rigorous. This affected plantation survival rates and optimal crop selection.</p> <p>Weak Institutional Branding and Visibility: Limited and poorly maintained signage reduced institutional recognition and missed opportunities for strengthening long-term presence.</p>
Sustainability	<p>Improved Water-Use Efficiency: Adoption of drip irrigation and better irrigation scheduling reduced water wastage, making agriculture more resilient in a water-scarce context.</p> <p>Behavioural Shift Toward Cost-Effective Practices: Reduction in chemical fertilizer use and adoption of natural farming inputs lowered recurring costs, making practices economically sustainable even without external subsidy.</p> <p>Creation of Durable Water Infrastructure: Investments in farm ponds, recharge structures, and drip irrigation systems created long-term productive assets that will continue to generate benefits beyond the project lifecycle.</p>	<p>Limited Post-Implementation Technical Handholding: After installation of irrigation systems and plantation activities, structured long-term technical support was limited. Without continuous agronomic guidance, farmers may revert to earlier practices or struggle with pest, soil, or crop management issues.</p> <p>Plantation Survival Concerns: In several locations, tree survival rates were low due to water stress, species suitability issues, and limited follow-up care. Poor survival directly weakens long-term environmental and income benefits.</p> <p>Absence of Standardized Natural Farming Protocols: Farmers improvised natural farming techniques individually. While</p>

		experimentation reflects ownership, lack of structured protocols and quality checks may affect consistency and long-term productivity.
Impact	<p>Participatory and Demand-Driven Approach: Farmers piloted new practices on small plots before scaling up. This gradual adoption increased confidence and reduced resistance, improving behavioural uptake.</p> <p>Community Contribution Model: Beneficiary co-investment enhanced ownership and ensured proper utilization of irrigation systems and other assets, strengthening outcome realization.</p> <p>Conversion of Barren Land into Productive Assets: Use of desilted fertile soil improved soil quality and expanded cultivable land area, contributing to productivity and income enhancement.</p>	<p>Agro-Climatic Suitability Gaps: In certain cases (e.g., lemon plantation in saline water areas), crop choices were not fully aligned with soil and water conditions. This reduced survival rates and long-term productivity gains.</p> <p>Uneven Adoption of Natural Farming Practices: While introduced widely, natural farming methods were improvised individually by farmers without structured standardization or continuous mentoring, resulting in inconsistent outcomes.</p>

Recommendations

High Priority	Medium Priority	Low Priority
<p>Strengthen Technical Due Diligence Before Implementation: Conduct mandatory agro-climatic suitability assessments (soil testing, water quality testing, crop feasibility analysis) before plantation or crop diversification activities. Avoid crop selection based solely on farmer preference where scientific evidence suggests risk (e.g., plantations in saline water areas).</p> <p><i>(Responsibility: Implementing Agency)</i></p>	<p>Improve Monitoring from Output to Outcome Level: Incorporate indicators such as income increase, cropping intensity, input cost reduction, and survival rates rather than focusing primarily on activity completion.</p> <p><i>(Responsibility: Implementing Agency)</i></p>	<p>Strengthen Adaptive Management Systems: Conduct mid-term technical reviews to identify survival issues, crop failure risks, or adoption gaps, and allow course correction.</p> <p><i>(Responsibility: Implementing Agency)</i></p>
<p>Shift from Target-Driven to Outcome-Driven Planning: Move beyond numerical target completion and prioritize depth of impact. Introduce beneficiary profiling and vulnerability-based targeting to ensure interventions reach farmers who can derive maximum and sustainable benefit.</p> <p><i>(Responsibility: Implementing Agency+ HDFC)</i></p>	<p>Strengthen Branding and Institutional Visibility: Install durable, standardized signage at prominent locations and ensure periodic maintenance to enhance visibility and recognition.</p> <p><i>(Responsibility: Implementing Agency)</i></p>	<p>Improve Plantation Survival Strategy: Select climate-resilient species, provide post-plantation support (watering schedules, mulching, fencing), and monitor survival rates systematically.</p> <p><i>(Responsibility: Implementing Agency)</i></p>
<p>Develop Standard Operating Protocols (SOPs) for Natural Farming and Plantation: Create clear, context-specific guidelines on crop spacing, irrigation scheduling, pest management, and aftercare to reduce improvisation and ensure consistency.</p> <p><i>(Responsibility: Implementing Agency)</i></p>	<p>Digitize Beneficiary Tracking: Develop a simple tracking system to monitor long-term adoption and income progression for evidence-based reporting.</p> <p><i>(Responsibility: Implementing Agency)</i></p>	<p>Enhance Convergence with Other CSR and Government Programs: Develop coordination platforms with other CSR actors and government departments to avoid duplication and maximize layered impact.</p> <p><i>(Responsibility: Implementing Agency)</i></p>

CASE STUDY

Ramesh Bhai's story of transformation – From Water Constraint to Enhanced Cropping Intensity

Ramesh Bhai is a smallholder farmer owning **4 bighas of agricultural land**. Prior to the project intervention, he was heavily dependent on rainfall due to limited irrigation facilities in the village. He cultivated **Kharif crops on all 4 bighas**, but during the Rabi season, he was able to cultivate only **1 bigha**, as water availability was insufficient to support irrigation across the entire landholding. This seasonal limitation restricted his annual agricultural output and income potential.

Under the project, Ramesh Bhai received a **drip irrigation system**, which significantly improved water-use efficiency and ensured more reliable irrigation. The improved irrigation infrastructure enabled him to manage water more effectively across his entire landholding.



Following the installation of the drip irrigation system, Ramesh Bhai experienced a significant transformation in his farming pattern and income. Earlier, due to limited water availability, he cultivated Kharif crops on all 4 bighas but could grow Rabi crops on only 1 bigha. With improved irrigation efficiency, he is now able to cultivate both Kharif and Rabi crops across the full 4 bighas, substantially increasing cropping intensity. The drip system optimized water use, ensuring that less water supported a larger cultivated area, which directly improved crop health and productivity.

In addition to expansion in cultivation area, input costs reduced considerably. Labour demand for irrigation and fertilizer application declined due to mechanized and efficient water delivery. As a result, overall cultivation costs have reduced to nearly 25% of earlier expenditure. Simultaneously, agricultural output has increased significantly—from approximately ₹1.5 lakh per bigha earlier to nearly ₹3 lakh per bigha now. The combined

effect of expanded seasonal cultivation, reduced labour costs, and increased per-bigha productivity has led to a substantial rise in Ramesh Bhai's annual farm income and greater financial stability.

The transition from partial seasonal cultivation to full-year cultivation across all 4 bighas demonstrates a clear structural shift in Ramesh Bhai's farming pattern. The doubling of output per bigha, alongside significant reduction in labour costs, provides strong economic evidence of improved farm profitability.

ANNEXURE

Project Level Scoring

LEGEND:

>= 4.6	3.6 - 4.5	2.6 - 3.5	<= 2.5
Excellent	Good	Moderate	Poor

OECD parameter	Indicator	Score
Relevance	Beneficiaries need alignment	4.4
	Local context alignment	4.0
	Quality of design	4.0
Overall Score		4.1
Coherence	Internal Coherence	3.0
	External coherence	3
Overall Score		3.0
Efficiency	Timeliness-	4.9
	Quality	4.6
	Operational efficiency	2.5
	Project Design	2.5
Overall Score		3.6
Effectiveness	Reach (target vs Achievement)	3.5
	Interim Result (Outputs & Short-term results)-	4.5
	Influencing factors (Enablers & Disablers)	2.5
	Differential results	2.5
	Adaptation over time	3.0
Overall Score		3.2
Impact	Significance- (outcome)	4.1
	Transformational change-	3.0
	Unintended change-	2.5
Overall Score		3.2
Sustainability	Potential for continuity	4.3

	Sustainability in project design & strategy-	2.5
Overall Score		3.4
Branding	Visibility	3.0
Overall score		3.4



PROJECT CODES AND THEIR IMPLEMENTATION PARTNERS

PROJECT CODES

- P0337
- P0360
- P0368
- P0385
- P0517
- P0518
- P0519
- P0709

IMPLEMENTATION PARTNER

Tata Education & Development Trusts-CInI
 BAIF- BISLD
 Tata Trusts- CInI
 Pride India
 Ambuja Cement Foundation
 Aga Khan Rural Support Programme
 Foundation for Ecological Security
 Global Vikas Trust

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