Impact Assessment of Holistic Rural Development Programme (HRDP) in Bihar and Maharashtra

HDFC Bank CSR Initiative



Report

Submitted by



Abbreviations

ANC Antenatal Care

ANM Auxiliary-Nurse Midwife

AWC Anganwadi Centre

AWW Anganwadi Worker

BDO Block Development Officer

CI Confidence Interval

CSR Corporate Social Responsibility

FGD Focused Group Discussion

HH Household

HRDI Holistic Rural Development Index

HRDP Holistic Rural Development Program

IDF Integrated Development Foundation

IDI In-depth Interviews

IRB Institutional Review Board

KV NGO Krushi Vikas Va Gramin Prashikshan Sanstha

MHH Menstrual Health and Hygiene

NGO Non-Government Organization

NRM Natural Resource Management

PRI Panchayati Raj Institution

SD&LE Skill Development and Livelihood Enhancement

SES Socioeconomic Status

SHG Self Help Group

SMC Samastipur Municipal Corporation

VDC Village Development Committee

VHND Village Health and Nutrition Day

Executive Summary

Holistic Rural Development Program (HRDP) is an initiative by HDFC Bank under its Corporate Social Responsibility (CSR). Under HRDP, NGOs are typically supported for projects lasting over 3-5 years. Each project consists of a cluster of around 10 - 15 villages. The focus is upon five major thematic areas, and the work in each focus area is done in every village under one cluster/project:

- a) Natural Resource Management
- b) Skill Development & Livelihood Enhancement
- c) Promotion of Education
- d) Healthcare, sanitation & hygiene
- e) Financial Literacy & Inclusion

The current study aimed to assess the project's impact in two intervention clusters in Bihar and Maharashtra. Two partner organizations implemented initiatives under the HRDP. The project was being implemented in 10 villages of district Samastipur, Bihar by the NGO Integrated Development Foundation (IDF) and 7 villages of district Pune, Maharashtra by the NGO Krushi Vikas Va Gramin Prashikshan Sanstha.

The current assessment was done to understand the overall impact the HRDP interventions made within the clusters. An assessment matrix was designed to evaluate the following domains in the intervention cluster:

- 1. Relevance to know if the projects done were aligned with the need of the region and addressed the major developmental gaps
- 2. Impact to know the overall impact or the most significant changes within the intervention cluster due to HRDP initiatives
- 3. Efficiency to evaluate how efficiently and effectively the NGO partners have implemented the HRDP
- 4. Convergence to understand if the maximum available resources or support were leveraged within the project either from the government or other non-state actors.
- 5. Sustainability and Replicability to know if sufficient mechanisms have been placed to ensure the sustainability of interventions and if they can be further scaled up.

A mixed-method approach of quantitative and qualitative assessment was adopted in the evaluation. A quantitative household survey was undertaken to get information related to specific interventions and the benefits gained from them, and a qualitative assessment was undertaken to understand the in-depth impact of the entire project.

A total of **767 households** were surveyed within Bihar, and **672 households** were surveyed in Maharashtra. All samples were randomly selected from the listing of households prepared within the intervention clusters. In Bihar, qualitative assessments were carried out with 8 stakeholders' interviews and 5 FGDs, and in Maharashtra, the same was carried with 4 stakeholders' interviews and 4 FGDs.

Key findings

When assessing for "Relevance," both in *Bihar and Maharashtra*, it was observed that all interventions related to various domains were essential and fulfilled the needs for the cluster region. Most stakeholders and beneficiaries highlighted that the interventions were essential not only for their households but also for the development of the village.

In terms of "Impact," it was evident from both household surveys and qualitative assessment that HRDP significantly impacted the intervention areas. In Bihar, direct beneficiaries include farmers, school-going children, women's SHGs, and adolescent groups, and in Maharashtra, direct beneficiaries include farmers, residents of villages, and school-going children. Overall, as per the HRDI, a 37% improvement in index score was observed in Bihar cluster, while a 57% increase in index score was seen for Maharashtra cluster.

Looking at the specific domain wise improvement (Based in HRDI and Related index {HRDI chapter}):

- a) **NRM:** In the NRM based on HDRI, both Bihar cluster (71% increase) and Maharashtra cluster (75% increase) showed significant improvement in index scores. In Bihar the key improvement observed were the increase in main produce of farms (15.4% increase), and as per the beneficiaries solar irrigations intervention provided significant benefits to agriculture practices (25%). In Maharashtra, there were decrease in overall fuel cost in the household (16.6% reduction) due to smokeless chulas and biogas production, while the overall output of farm increased (16% increase) due to improved water retention and conservation efforts. As per the beneficiaries 35% agreed that the solar street lights and hand-held devices benefitted them a lot.
- b) H&S: In the Health and Sanitation domain, the overall change in index in Bihar cluster was minimum (9% increase), and marginally high in case of Maharashtra cluster (38% increase). In both cluster as there was no baseline data thus, changes in safe drinking water or sanitation practices couldn't be observed. However, the medical camps were a new initiative in the region spearheaded by both the NGO partners. As per the beneficiaries, both in Bihar cluster (9%) and Maharashtra clusters (38%) they were significantly benefitted by the health camps conducted.
- c) **SDLE**: In Bihar a 30% improvement in HRDI was observed, and similarly in Maharashtra 33% improvement in the HRDI was seen. Both clusters showed moderate improvement within the domains. In Bihar, the significant change observed was the 42.7% increase in the earning of the farmers in a year due to new agriculture interventions, and moderate improvement was observed (13.2% increase) when looking at earning due to livestock in a month. In Maharashtra, a moderate improvement was seen in farmers earning in a year (26.1% increase) and earning due to live stock (22.8% increase).
- d) **Education**: The education domain showed the highest improvement as per the index scores change in Maharashtra (89% increase) and medium change in Bihar (43% increase) clusters. In Bihar, overall children were now increasingly attending classes and missing fewer days (17.6% increase) compared to baseline and there was an average 9% increase in overall scores (when graded in %) performance of the children. In Maharashtra, a similar trend was seen where now children were attending 33.3% more classes in comparison to baseline, also the proportion of children getting A+ to A- grades improved by 15%.
- e) Financial and digital literacy (Not based on HDRI index): Both in Bihar (62% respondent) and Maharashtra (85% respondent) cluster the beneficiaries found the interventions extremely or very essential for the household and village. Overall the beneficiaries were now more aware of banking services and government schemes available and also knew how to avail those services in both clusters.

When NGOs were assessed in terms of "Effectiveness," based on the interaction with beneficiaries and stakeholders, it was clear that the NGO has been effective and has stayed in touch with the beneficiaries and stakeholders to monitor progress and provide support. In Bihar, the all stakeholders, like the PRI members, Farmers group, SHG members, and school staff, confirmed that the IDF staff were in constant touch with them for guidance and support and monitored the progress of implemented activities within the villages. Based on interaction with the IDF members, their team established mechanisms to review the action taken and monitoring of follow-up activities and organization level, weekly review meetings were organized. Thus, there was a clear-cut monitoring of key milestones through Targets vs. Achievements and quarterly reporting. In Maharashtra, similar to Bihar, all stakeholders, PRI members, Farmer's group, SHG members, and school staff informed that the Krushi Vikas members were in constant touch with for following up on implemented task. However, the Krushi Vikas team did not maintain any specific progress report and preferred to have a positive contact with the project beneficiaries, Stakeholders and HDFC CSR team for the implementation of project activities.

In terms of "Convergence," most positive response was observed in the "financial and digital literacy domain" where beneficiaries were now more aware of the banking services available and how to access these services. Beneficiaries in both Bihar and Maharashtra cluster were also made aware of various different government schemes and were provided information on how to access these schemes. Moreover, activities like health camps within the villages, active support for livestock (health camps for livestock), promotion of adopting schemes for adopting sanitation practices (IHHL schemes), and engaging relevant government officials or departments (Dept. of agriculture; Dept. of Health) were some of the key activities done by the NGO partners to converge existing government services and resources to the intervention clusters.

On assessment for "Sustainability and Replicability," NGO representatives from both Bihar and Maharashtra said that they had established various committees and transferred their works through the handover of the processes to relevant community bodies such as Village Development Committee (VDC), SHGs, SMCs, etc. However, most stakeholders failed to provide such information. Further, based on the interaction with beneficiaries and stakeholders, there seems to be a division of opinion between which interventions would last and which won't. This divide is indicative of a lack of a clear exit strategy or a sustainability plan with beneficiaries and stakeholders. Within the Maharashtra cluster, where schools have a management committee to sustain interventions, no such structured mechanism was identified for other interventions.

The key programmatic recommendations for both Bihar and Maharashtra are –

- Communication strategies should be developed to make the people more aware of the
 activities done within and across the villages. The cross information of interventions can also
 motivate villages to adopt appropriate strategies and create a more uniform intervention
 implementation.
 - A monthly or quarterly panchayat level meeting needs to be done with all key community members, including villagers, to discuss the interventions done, progress made, and further gaps or needs to be addressed. Such meetings will not only create visibility but also help increase ownership of the interventions.
- Due to lack of baseline data understanding the true change or impact within the cluster was difficult. Thus, for future HRDP activities, we highly recommend collecting baseline data for all

thematic areas beforehand. Based on the HDRI key indicators and other related indicators as detailed in "Impact", changes were observed within the focused domains. Despite the positive shift, the change was not uniform across all domain and we attribute this to the individualistic approach taken for intervention. Thus, while considering individual cases changes were observable, but overall, the significance was reduced in some of the domains. To maximize the total impact observed, we have the following recommendation

- Instead of an individualistic approach to intervention where certain activities are only done with a small group or few individuals, more common interventions need to be identified within the village. For example, suppose the question is about vermicompost or about providing organic fertilizer. In that case, a central approach should be taken through which all farmers within the village can benefit from them, and also the strategy can be scaled to other villages. A more wide-reaching intervention increases the number of beneficiaries and provides a uniform change that can be sustained better.
- Mid-line assessment needs to be integrated within the overall strategy, where assessment can be done to understand the progress made from the baseline. The mid-line course correction would help identify early the interventions or strategies that are working well within a given cluster and what changes need to be made. It would also provide input on the number of beneficiaries currently being helped within the village and their feedback on interventions.
- Pre-planned interventions and expected strategic outputs and outcomes need to be defined before implementation. Even though holistic development is the overall goal for the HRDP, there is a need to define specific targets or measurable changes within an intervention cluster.
- Overall, as per the interaction with the stakeholder and the NGO staff members, the implementation partners closely observed the changes taking place within the implementation clusters. The NGO's also stayed in constant touch with all stakeholders throughout the intervention period. Based on the NGO's data on milestones and activities done, it can be clearly assumed that whatever changes or impact observed have been due to the work done by the implementation partners. However, there was a difference in strategic approach between the two NGO partners, and due to lack of targets or timeline-based targets for the overall project, it was not possible to clearly highlight, if the NGO had been effective on their timelines and delivered changes as per a defined strategy. Based on the findings, our recommendations are:
 - All interventions or strategies adopted should have a specific timeline with goals and achievable milestones. Such rigor would allow the intervention to be monitored and ensure that targets are met on time to achieve the expected impact.
 - There should be a uniform follow-up strategy for each intervention, and visitation or follow-up strategies should be shared with all beneficiaries and stakeholders. Having a uniform strategy allows monitoring of activities and provides a better opportunity to interact with all stakeholders and beneficiaries over a more extended period. Monitoring and mentoring visitations like supportive supervision can be adopted for further strengthening of intervention.
- Convergence with existing schemes is an essential step in utilizing or leveraging the existing resources available within the government system. Additionally, linking services and

schemes would allow the villages to be more independent and help support the sustainability of the intervention. Our recommendations are:

- A communication strategy needs to be developed to make all stakeholders and beneficiaries aware of the possible benefits/schemes they can avail in all applicable domains.
- A mechanism needs to be placed along with monitoring to ensure that all eligible beneficiaries are linked to schemes. This includes any specific intervention.
- A structured and detailed exit strategy needs to be made for each intervention to ensure stronger sustainability. The strategy, at minimum, should include the following key points:
 - The key members/group who will maintain the intervention or how the process will be maintained;
 - How to monitor progress and identify gaps
 - Whom to contact when there are issues and gaps or where the reporting can be done;
 and
 - What support can be available from the existing government systems, non-state actors, implementing NGOs, or even the HRPD project team. Details on the type of support like funds or technical expertise, or legal support also needs to be highlighted.
 - Before exit, regular meetings should be done to make all stakeholders and beneficiaries aware of the existing strategy, additionally, a weaning-out period should be kept to ensure a smooth transition away from direct support

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Background

Holistic Rural Development Program (HRDP) is an initiative of HDFC Bank's CSR activity. Under HRDP, NGOs are typically supported for projects lasting over 3 to 5 years. Each project consists of a cluster of 10 to 15 villages. Development interventions are supported to address the local needs, focusing on integrated development to achieve the "Parivartan" Vision.

Project Objectives

HRDP focuses on five major thematic areas, and the work in each focus area is done in every village under one cluster/project. The key focus areas include:

- f) Natural Resource Management
- g) Skill Development & Livelihood Enhancement
- h) Promotion of Education
- i) Healthcare, Sanitation & Hygiene
- j) Financial Literacy & Inclusion

The project aims at improving the intervention villages' overall developmental status by supporting the local bodies and NGOs in implementing strategies under key focus areas. The implementation further helps strategize future development projects in the region and scales up across different states.

Study objectives

The current study assesses the project impact in intervention areas. A total of 5 projects associated with five major thematic areas were evaluated. These projects were implemented by 2 partner organizations in 2 states, Bihar and Maharashtra. The project was being implemented in 10 villages of the Samastipur district in Bihar by the NGO Integrated Development Foundation (IDF) and 7 villages of Pune district in Maharashtra by the NGO Krushi Vikas Va Gramin Prashikshan Sanstha.

The primary objective of the assessment was to provide estimates on impact indicators in key domain areas. The other key areas to assess were:

- a) How well were the objectives of the projects met?
- b) What changes have been made in the lives of the beneficiaries of the projects?
- c) What were the inter-region changes? What is the performance comparison between the regions?
- d) What were the theme-wise and holistic impacts in alignment with the project objectives?
- e) How can we better implement the intervention for future scale-ups?

Study Methodology

A mix of quantitative and qualitative assessments was adopted in the evaluation. A quantitative household survey was conducted to obtain information related to specific interventions and the benefits gained from them, and a qualitative assessment was conducted to understand the in-depth impact of the entire project. As there was no control region within the project, a final strategy was proposed based on a retrospective study wherein information from beneficiaries and other related stakeholders within the intervention region was collected to gain insights on pre & post intervention statuses.

Study geography

The current evaluation was carried out in two Clusters, one in Bihar and the other in Maharashtra. The State-wise villages covered in the cluster are detailed below:

State	No. of Cluster	District and Block/Taluka	Villages within each cluster
			Garuara
			Tal Dasraha
			Rampur Dudhpura
			Bishunpur Bande
Bihar	1	Samastipur district;	Chak Jainab
Dillai	1	Samastipur Block	Chandopatti Rudauli
			Naraenpur Darhia
			Pahepur
			Salempur Dasraha
			Chandopatti
			Shingadwadi
			Rautwadi
		Pune District; Shirur	Khairewadi
Maharashtra	1	Taluka	Munjalwadi
		Taluka	Lakhewadi
			Midgulwadi
			Hivare

Broad Categories of Intervention, Unit of Analysis, and Assessment Methods

As this was a large project with several focus areas and intervention strategies, the sample size was dependent on the unit of analysis. Based on the discussion with the implementers (NGO Partners and HDFC Project Managers), the following unit of analysis emerged:

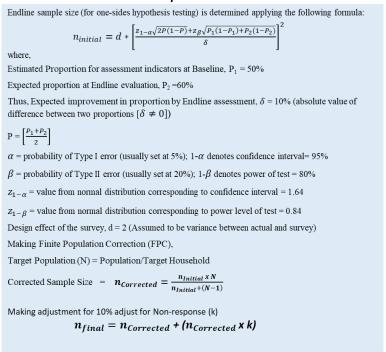
T.ma of Intomiontion	The matic Arrasa Coursed	Huit of Aughoria	Assessment Method		
Type of Intervention	Thematic Areas Covered	Unit of Analysis	Quantitative	Qualitative	
Village-wide interventions impacting households / individuals within the village	Natural resource management, skill development & livelihood enhancement, Healthcare & hygiene	Household / individuals within households (especially farmers - primary and secondary earners)	Household surveys	FGD with selected beneficiaries; IDI with Panchayat members; IDI with Government officials; IDI/FGD with other related stakeholders	
Interventions impacting schools (infrastructure, teachers, and children)	Promotion of education	Children going to school (including parents, teachers / administrators)	Household surveys (including children and parents)	FGD with Children IDI with Teachers; IDI with School Admin; IDI with Panchayat members; IDI with Government officials; IDI/FGD other related stakeholders	
Intervention impacting a specific group or type of beneficiaries (SHG, women, adolescents / youth, farmers)	Skill development & livelihood enhancement, natural resource management, healthcare & hygiene	Group or individual beneficiaries		FGD with a group of beneficiaries; IDI with Panchayat members; IDI with Government officials; IDI/FGD other related stakeholders	
Interventions at Anganwadi Centres	Promotion of education	Anganwadi Centers (Anganwadi Workers)		FGD with Anganwadi workers; IDI with Government Officials; IDI/FGD other related stakeholders	
Interventions related to healthcare, VHNDs and hygiene	Promotion of health	ANM		IDI with ANM; IDI with PRI members; IDI with Government officials	

Sample Size for Quantitative and Qualitative Assessment

a) Sample Size for Quantitative or Households Survey

For the household survey assessment, the sample size was calculated with the assumption that from the beginning (baseline/start) to the end (end line), there has been a 10% change/improvement in the status of the indicators (minimum). Thus, the sample size was calculated at 95% CI, 80% power, and 2 design effect. The primary sample was then adjusted for finite population correction (FPC), wherever applicable, and a 10% non-response buffer was taken for calculating the final sample size.

Box 1: Sample Size calculation



Based on the sampling formula, a minimum of **721 households** from Bihar and **662 households** from Maharashtra were to be surveyed within the assessment.

During the assessment, a household list (based on individual beneficiary) was provided for sample selection. However, it was observed during pilot testing that most beneficiary were members of same household thus reducing the overall household number within the villages. To counter this, the NGO representative for each village helped the survey team identify pocket regions with household within the village where beneficiaries were located. Depending on the sample size, if there were sufficient household, they were randomly selected, or else if the sample was exact then all household were selected. In cases where the sample size was more than the number of household, then additional HH were surveyed from other villages to complete the sample. Overall, in most villages the sample was randomly selected from the available HH. Thus, a total of **767 households** were surveyed within Bihar, and **672 households** were surveyed in Maharashtra. All samples were randomly selected from the listing of households prepared within the intervention villages.

b) Sample Size for Qualitative Assessment

Based on the type of beneficiary or stakeholder, either Focussed Group Discussion (FGD) and In-Depth Interviews (IDI) were proposed for the qualitative assessment. At the end of the assessment, the following type of stakeholders was assessed within Bihar and Maharashtra:

Chaha	Bonefisions/Chalcabaldon	No. of Interviews	
State	Beneficiary/ Stakeholder	FGD	IDI
	Farmers club	1	
	SHG members (especially women)	1	
	Adolescent girls/ Youth Groups	1	
	Children going to school	1	
	Parents of Children going to school	1	
Bihar	Panchayat members (PRI)		3
Dillai	Teachers		1
	School Admin (Principal)		1
	AWC Workers		1
	Government officials (BDO; Patwari;		3
	Panchayat Secretary		J
	ANM		1
	NGO Representative		1
	Total	5	11

State	Donofisions / Stokeholder	Proposed Sample	
State	Beneficiary/ Stakeholder	FGD	IDI
	Farmers	1	
	SHG members (especially women)	1	
	Adolescent girls	1	
	Panchayat members		3
Maharashtra	Children going to school	1	
ivialialasiitia	Parents of Children going to school	1	
	Teachers		1
	School Admin (Principal)		1
	ANM		1
	Government officials		3
	NGO representatives		1
	Total	5	10

c) Data collection

For household survey data collection KOBO toolbox a mobile based online/offline survey form was used in the field. The KOBO application allows electronic form filling with built in check and skips in the form. The survey data was captured live at the end of the data in the assessment team office and was reviewed for quality and consistency.

For qualitative interviews, audio recordings were done on appropriate devices and data was transferred to assessment team headquarter for review and transcription.

Assessment matrix

The overall assessment was carried around to answer the following components:

Area of Assessment	Things to Assess
AICA OI ASSESSIIICIIL	lilligs to Assess

Relevance	Were project activities in line with the needs of target communities?
	Were any needs of the community missed within the limits of focus areas
	identified for HRDP?
Effectiveness	How well have the NGO partners implemented the program as per the
	planned timelines?
Impact	What are the short-term and long-term changes? To what degree have
	the projects made changes in the lives of the project beneficiaries?
Convergence	How well has the program used the existing resources from the
	government policies/schemes wherever applicable?
Sustainability	How well will the projects sustain after the exit of HDFC Bank from the
	respective regions?
Replicability	How much replication of the project activities has been achieved inside
	and outside of the target villages?

Ethical considerations

Protection of human subjects

Fieldwork was not initiated until after approval was received from Sigma IRB Institutional review board (Ref. No.: PIMS/ PO/ 2021/ 62) (Annex 3). All field research team members signed confidentiality agreements. Research investigators underwent thorough ethical training, including protecting participant confidentiality, understanding informed consent, recognizing adverse events, and specific, detailed procedures for data handling and storage for this project.

Informed consent

All participants were provided information based on the scope and nature of the interviews to be conducted. Verbal consent was obtained by researchers from all participants at the beginning of the interview. During the informed consent process, researchers explained to participants the basic purpose and conduct of the study, including confidentiality procedures and the right to refuse or withdraw at any time.

Ensuring anonymity of respondents

Post data collection, all qualitative interviews were audio-recorded; audio files were marked with unique ID Codes and saved in a password-protected folder on the computer. During transcription, all direct and indirect identifiers were encrypted to ensure anonymity.

Combined cluster-level findings of Bihar and Maharashtra based on the assessment matrix

The current impact assessment was carried out in the two intervention clusters in Bihar and Maharashtra. As the evaluation was carried out using a predefined impact assessment framework thus, the findings from the two clusters have been combined in a similar fashion. Under each domain, the key quantitative and qualitative findings have been presented under the assessed cluster. Along with findings, the overall conclusion and recommendations based upon observations have been presented within the framework.

A. Relevance

One of the key parameters to assess the interventions was its relevance, i.e.,

- Whether project activities are in line with the needs of target communities?
- Whether any needs of the community missed within the limits of focus areas identified for HRDP?

Based on the assessment, the key findings are summarized below:

Domain	Relevance - Assessment findings				
	Bihar-	cluster	Maharashtra-cluster		
Cluster	Findings of Household Survey	Findings of Qualitative Assessment	Findings of Household Survey	Findings of Qualitative Assessment	
Natural Resource Management	- 51% of households were aware of the activities for NRM related to farming, such as cluster-based vegetable cultivation and organic farming through the production of vermicompost, and out of those who were aware, nearly 48% were covered under these activities	PRI members - Activities implemented under HRDP by the NGO IDF were very much required for their villages. One of the PRI members said that there was the installation of solar pumps and the introduction of vermicompost for farming which were not earlier present in their villages. Farmers' group - These interventions were very much	 About 48% of the households were aware of the activities, and nearly 44% were also covered under these activities. The majority of households agreed that these activities were very essential for their household (61%) and village (57%). 	PRI members - These activities were very much required for their villages. Specifically, activities like check dams, well-deepening, etc., were essential for the village.	

Domain	Relevance - Assessment findings			
	Bihar-cluster		Maharashtra-cluster	
Cluster	Findings of Household Survey	Findings of Qualitative Assessment	Findings of Household Survey	Findings of Qualitative Assessment
	 84% of respondents agreed that these activities were required for their household. 97% of respondents agreed that these activities were required for their village 	required and allowed them to understand the concept of maximum utilization of natural resources to enhance the crop yield.		
Skill Development & Livelihood Enhancement	 46% of households were aware of the SDLE initiatives for agriculture/ farming. Out of those aware, nearly 32% were covered directly under the intervention activities through training/ participation in the workshops Most respondents agreed that these initiatives for imparting knowledge and building capacities of farmers were essential for their household (84%) and the overall development of their village (97%) 	PRI members - Activities implemented under HRDP by the NGO were very much required for their villages as it met the needs of the residents of the villages. Moreover, farmers were given skill training and knowledge regarding organic farming, which they did not know earlier. Farmers' group - These interventions were very much required and allowed them to understand the concept of maximum utilization of natural resources to enhance the crop yield.	 On inquiry, out of the total, only 18% of the households were aware of activities or interventions related to farming and associated activities. Out of the households aware of the various activities or interventions under the SLDE, the majority felt that the activities were very essential for their household (55%) and the village (58%). 	NGO representative - the key activities for land productivity include imparting knowledge and requisite skills to farmers regarding soil nutrient management through farmbased school, soil testing studies (assisted by the NGO), agriculture department, and crop diversification with the promotion of vegetable crops. Thus, based on this ideology, the activities under the SDLE were considered to be essential for the Maharashtra cluster.

Domain		essment findings		
	Bihar-cluster		Maharashtra-cluster	
Cluster	Findings of Household Survey	Findings of Qualitative Assessment	Findings of Household Survey	Findings of Qualitative Assessment
		Self Help Group (SHG) - Training under the HRDP was required for their group and to help them with their needs. These training have supported them in accomplishing their goal of self-reliance and livelihood generation.		
Health & Sanitation	 When enquired about health and sanitation-related activities under HRDP, 93% of respondents were aware of the activities implemented within the cluster, and 87% were covered under these activities. 30% of respondents agreed that these activities were extremely essential, and 41% agreed that these activities are very essential for their household. 	and - HRDP activities sincerely targeted the real- time challenges faced by the community. Support of NGO staff during VHND sessions has strengthened the services regarding Maternal and child health and Adolescent health. Health camps have benefitted not only the resident villages but also people from other villages. AWW - These activities were in line with the needs of the AWC and beneficiaries, including infants, young children, pregnant women, lactating mothers, and adolescent girls. These met the training needs	 44% of the respondents out of the total were aware of the health camps organized to promote health (Annex 2). As per the respondents who were aware of activities done for health, the majority felt that activities done for promoting health were very essential for both the village (57%) and the household (64%). 	

Domain	Relevance - Assessment findings				
	Bihar-cluster Bihar-cluster		Maharashtra-cluster		
Cluster	Findings of Household Survey	Findings of Qualitative Assessment	Findings of Household Survey	Findings of Qualitative Assessment	
		of service providers also such as AWW and AWW helpers. Before HRDP, the condition of AWC was inferior. Still, after the beautification work, there has been a complete transformation in the landscape of the AWC that is more attractive to the beneficiaries for availing services.			
Education	 Most households were aware of activities being implemented in the schools under HRDP. These include - beautification of schools (96%), increased amenities within schools (88%), training on waste management (63%), smart classes (41%), and remedial classes (31%). 48% of respondents agreed that these activities were essential for the schools and children. 	Principal, School teacher - A lack of infrastructure and study materials hampered education within the villages earlier. Thus, post-HRDP activities carried for a child-friendly environment were essential and have resulted in such a transformation that school premises are more attractive to the students and children are showing more interest in education. The children's needs, like audiovisual aids (in smart classes), and remedial classes, were essential, and HRDP activities	 44% of the respondents out of the total were aware of the health camps organized to promote health. All work done was perceived as extremely (25%) or very (60%) essential for the children and the schools. 	According to parents, beautification of schools was very much required as it makes the school environment more engaging for a child. Also, due to hygiene practices, children took care of themselves and ensured their surroundings remained clean. Additionally, the parents felt that smart classes were essential for the children due to increased technological advancements within the country. They believed the smart classes would expose children to new technologies	

Domain	Relevance - Assessment findings				
	Bihar-cluster		Maharashtra-cluster		
Cluster	Findings of Household Survey	Findings of Qualitative Assessment	Findings of Household Survey	Findings of Qualitative Assessment	
		have made learning more engaging and interesting.		and make them more engaged in education.	
Financial/ Digital literacy	 83% of respondents were aware of digital/ financial literacy activities, and 40% of them had attended/trained under these activities. 94% of respondents said these activities were essential for their households and the villages 		 Only 21% of the respondents were aware of various activities done for improving financial literacy within the villages. Most respondents agreed that the activities were extremely (29%) or very (56%) essential for their village. Respondent also agreed that these activities were equally essential ('extremely' 23%; 'very' 59%) for their households (family members). 		
Conclusion	 much in line with the needs Most stakeholders and ben the development of the villa 	of the intervention areas. eficiaries highlighted that the inf age	s domains were required for the to	for their households but also for	
			s lack of awareness regarding the ially observed in Maharashtra clus		

Domain	Relevance - Assessment findings			
	Bihar-	cluster	Maharash	tra-cluster
Cluster	Findings of Household Survey	Findings of Qualitative Assessment	Findings of Household Survey	Findings of Qualitative Assessment
	due to the individualistic ap	proach taken, there was less intra	a intervention awareness within t	he clusters. Additionally, due to
	sample being randomly selected for survey, the type of intervention covered/aware by the beneficiary got further limited.			eficiary got further limited.
	Overall, as per the beneficiaries, the interventions done within the villages were required for the household and the villages. However, despite the large number of interventions done, there was still a lack of awareness regarding interventions being done either within the same village or across villages. In order to negate this, we recommend that during HRDP implementation: • Communication strategies should be developed to make the people more aware of the activities done within and across the villages. The cross information of interventions can also motivate villages to adopt appropriate strategies and create a more uniform intervention implementation.			
Recommendations				
 Monthly or quarterly panchayat-level meetings need to be done with all key community members, inc 				members, including villagers to
	discuss the interventions done, progress made, and further gaps or needs to be addressed. Such meetings will not only create			
	visibility but also help in	crease ownership of the intervent	ions.	

B. Impact

Another important parameter to assess the interventions was in terms of their impact made within the intervention clusters i.e.,

- What were the key changes made within the cluster due to HRDP interventions?
- To what degree have the projects made changes in the lives of the project beneficiaries?

Based on the assessment, the key findings are summarized below:

Domain	Impact - Assessment findings			
	Bihar-cluster		Maharashtra-cluster	
Cluster	Findings of Household Survey	Findings of Qualitative	Findings of Household Survey	Findings of Qualitative
	Findings of Household Survey	Assessment	Findings of Household Survey	Assessment
Natural Resource	- 89% of respondents agreed	- PRI members during	- Most respondents felt that	- Respondents of the
Management	that their household/	interviews confirmed that	water storage/irrigation	farmers' group said that

Domain		Impact - Asses	ssment findings	
	Bihar-	cluster	Maharash	tra-cluster
Cluster	Findings of Household Survey	Findings of Qualitative Assessment	Findings of Household Survey	Findings of Qualitative Assessment
	village was benefitted due to farming-related interventions. - 43% of respondents were benefited from an increase in types of vegetable cultivation. There was an increase in the number of vegetables cultivated. - Due to vermicompost, there was an 11% decrease in the expenditure made on fertilizers - 93% of respondents agreed that their household/ village were benefited due to solar irrigation. - 58% of respondents said that solar pumps have made irrigation more convenient than traditional methods - Cost for irrigation reduced by 15% due to use of solar powered pumps	the use of organic fertilizers had improved the fertility of the soil, and the Government was promoting the same. In some villages, there had been 100% adoption of organic farming practices by the farmers. - As per PRI members, solar irrigation reduced the cost of irrigating land for farmers. - According to the farmers' group, it has resulted in the dual benefits — reduction in the cost of irrigation and enhanced quality of agricultural produce.	activities provided significant (35%) benefits or were somewhat (41%) benefitted. - Most respondents said that there was an increase in soil fertility (62%) and more water availability for farms (35%). - Farmers that benefitted from the increased farming output reported a 24% increase in primary produce from their farms when comparing current output versus output before HRDP activities. - Most respondents reported a significant increase in water levels within the wells (32%) and increased drinking water availability within the household (13.7%).	rainwater is currently not wasted due to the construction of dams, and this water was utilized for agricultural and drinking water purposes. There is an increase in area under irrigation and also increased availability of water for more months. - PRI members added that the activities to improve water availability were essential, and desilting/repairing dams was vital for the villages and increased the overall land under cultivation due to improved water availability. - PRI members - initiatives like smokeless stoves greatly benefitted the women and the household. - Farmers' group - solar lights have been very

Domain		Impact - A	Assessment findings	
	Bihar	Bihar-cluster		ntra-cluster
Cluster	Findings of Household Survey	Findings of Qualitative Assessment	Findings of Household Survey	Findings of Qualitative Assessment
			 Overall, more households have had a stable drinking water supply due to HRDP activities in the last 3 years. Most households reported 	helpful and convenient, especially during long power cuts.
			that solar lights improved the overall security within the village at night (61%), and those lights were available throughout the night (60%).	
			- Solar pumps made irrigation more convenient than traditional methods (71%).	
			- Land covered under irrigation significantly increased due to automation (41%), and the overall manpower requirement was also reduced (12%).	
			 Most reported that there had been a significant 	

Domain	Impact - Assessment findings			
	Bihar-	cluster	Maharashtra-cluster	
Cluster	Findings of Household Survey	Findings of Qualitative Assessment	Findings of Household Survey	Findings of Qualitative Assessment
	- Almost 42% of	PRI members - SDLE activities	reduction in indoor smoke (77%) during cooking Respondents said that	- PRI members said that
	respondents were significantly benefitted, and 21% of respondents reported receiving some benefits from SDLE initiatives related to agriculture.	would have an impact on livelihood generation. With the utilization of techniques for organic farming and vermicompost and solar pump installation, the cost was reduced, and crops could be	improved efficiency in using water for irrigation (40%) and immediate increase in farm productivity (37%) were the significant benefits.	NGO partners promoted farmers to learn and adopt alternate farming (like vegetable cultivation) and shift towards organic farming.
Skill Development & Livelihood Enhancement	 On average, the productivity of primary produce per acre of land increased by 44%, and earnings from farming due to intervention in a year increased by 74%. 72% of respondents said that there was an improvement in livestock health. 17% of respondents said that there was a reduction in cost for maintaining livestock. 	Farmers' group - Knowledge regarding judicial use of resources had resulted in the increased overall productivity of the farmland. Self Help Group (SHG) - Activities under the SDLE initiative have strengthened these SHGs as now they learned the process of bookkeeping, access loans from banks, exchange money among themselves, and make savings for themselves. Now, members are more confident	 Overall, an average increase of 69% earnings from farming within a year. The majority of respondents informed an improvement in the overall health of the livestock (69%), increased knowledge on livestock management (25%), and a 65% increase in income from livestock 	 As per farmers' group, due to crop diversification, not only did the farmers have an extra source of income, but also the produce could be used for their own consumption. Farmers' group - Their cattle have been benefitted due to health check-up camps. Additionally, the NGO group also provided support to buy alternate livestock, which the farmers then successfully utilized as an alternate

Domain		Impact - Asses	ssment findings	
	Bihar-cluster		Maharashtra-cluster	
Cluster	Findings of Household Survey	Findings of Qualitative Assessment	Findings of Household Survey	Findings of Qualitative Assessment
	- 41% increase in income generated due to alternated livelihood produce, and 13% increase in income generated due to primary livestock.	about training other women if required in the future. NGO representative - Selfemployment and business opportunities were created for 70 out of 124 women and adolescent girls due to the stitching centre. A total of 36 women are engaged in Microenterprises activities. All 10 SHG with 131 women were connected with bank and 5 social enterprises are currently functional.		source of income and sustenance.
Health & Sanitation	 83% of respondents said that they were benefitted from the services of health camps. 97% of respondents said that their knowledge about health issues had improved. 50% had easy access to the health personnel, and 35% had easy availability of medicines. 	ANM - the number of registrations for Antenatal Care (ANC) had increased for the VHND sessions. Immunization among children during these VHND sessions had also increased due to awareness generation activities by the NGO. Adolescents' group - Due to MHH related activities, adolescent girls are more aware of the mensuration and	- Most respondents agreed that their knowledge has improved related to health issues (88%). Many respondents benefitted from easy access to health personnel (59%) and medications (60%).	

Domain		Impact - Asses	sment findings	
	Bihar-	cluster	Maharash	tra-cluster
Cluster	Findings of Household Survey	Findings of Qualitative Assessment	Findings of Household Survey	Findings of Qualitative Assessment
		associated issues. Now, girls and women started discussing the challenges more comfortably and confidently with their peers and health workers.		
Education	 Nearly 49% of respondents agreed that they were very much benefitted from these activities. Parents informed that there had been an increase in the number of days children are going to school. On average, there has been a 3 day increase in attendance. Additionally, there has been an overall improvement in the children's academic performance. On average, there has been 9% increase in academic performance (when scored in %). Also, there has been 	Principal, School teacher - Activities for creating a child- friendly environment in the schools have made schools more attractive to the students who were earlier not interested in coming to schools. Additionally, smart Classes provided a better way of learning, specifically those subjects and concepts that are difficult to understand without adequate visualization techniques. It made learning more interesting and engaging, and now children are more eager to learn about new things and concepts. It also assisted teachers in making children understand complex concepts which they found	 The majority of respondents reported an increase in child's interest in studies (76%) due to the improvements made in school Children tend to miss fewer days in school. On average children go to school for 24 days compared to past (18 days before HRDP) 39% of the respondent also mentioned that the children overall grades improved. On average there has been a 37% increase in the percentage scores of children when compared to before HRDP. Also, there has been a 15% increase in the number of 	- Teachers, school-going children, and their parents all said that there is a positive impact on schools and learning due to education-related interventions.

Domain	Impact - Assessment findings			
	Bihar-cluster		Maharash	tra-cluster
Cluster	Findings of Household Survey	Findings of Qualitative Assessment	Findings of Household Survey	Findings of Qualitative Assessment
	a 4% increase in children getting grades between A+ to B-	earlier difficult to make children understood. Participants of Children's group - Children are more aware of their roles and responsibilities and assists teachers in the day-to-day activities of schools.	children getting A+ to A- grades in school when compared to before HRDP.	
Financial/Digital literacy	 50% of respondents agreed they had received significant benefits from them. The type of benefits included – awareness about basic banking services (83%), how to access these services (28%), and various Government schemes (18%). 	activities of schools.	 Moreover, 58% of the respondents agreed that the activities provided significant benefits to their home and the village. When asked about specific benefits, most respondents informed that their awareness (63%) and knowledge on access (53%) of banking services improved a lot. 	
Conclusion	It was evident from both househ assessment that HRDP significan areas. Direct beneficiaries includ children, Women SHGs, and Ado	tly impacted the intervention e Farmers, School going	It was evident from household s assessments that HRDP significa areas. Direct beneficiaries include and school-going children.	ntly impacted the intervention

Domain	Impact - Assessment findings				
	Bihar-	cluster	Maharash	tra-cluster	
Cluster	Findings of Household Survey	Findings of Qualitative Assessment	Findings of Household Survey	Findings of Qualitative Assessment	
Recommendation	activities, we highly recomm Despite the changes observe attribute this lack to the indicator of an individuals, more considered about vermicomposion which all farmers with wide-reaching intervence sustained better. Mid-line assessment the progress made for strategies that are with the number of benein the progresion of the progress made for strategies that are with the number of benein the progress made for the number of benein the number of benein the progress made for the number of benein the number of benefits the numbe	end collecting baseline data for all ed, there was a certain lack of unifor vidualistic approach taken for intext observed, we have the following ualistic approach to intervention where the providing organic fertilization that the village can benefit from the vention increased the number of better the baseline. The mid-line courorking well within a given cluster afficiaries currently being helped with the overall goal for within an intervention cluster.	thematic areas beforehand. primity of change and the quantum revention and a lack of mid-line assurecommendation where certain activities are only doentified within the village. For examer. In that case, a central approachem, and also the strategy can be seneficiaries and also provided a uniform overall strategy, where assessments are correction would help identify and what changes need to be made hin the village.	on of change observed. We sessment or course correction. One with a small group or few ample, suppose the question is shadown that the scaled to other villages. A more niform change that can be and can be done to understand a gearly the interventions or le. It would also provide input on lined before implementation.	

C. Effectiveness

The effectiveness of the HRDP was assessed in terms of how well the NGO partners have implemented the program as per the planned timelines. The key findings are:

Domain	Effectiveness - As	sessment findings	
Cluster	Bihar-cluster Bihar-cluster	Maharashtra-cluster	
Cluster	Findings of Qualitative Assessment	Findings of Qualitative Assessment	
Natural Resource Management	PRI members - During the implementation of the interventions under HRDP, the NGO staff were regularly in contact with them either face-to-face or through telephone/ mobile. The contact person from the NGO met the PRI members at least 3 to 4 times a week. The NGO staff used to share a plan of activities before any intervention. Meetings were frequently organized between PRI members, community leaders, and IDF staff to discuss the problems of villagers and find solutions. Farmers' group - The concerned persons from NGO have been in regular contact with them since the inception of this program i.e., the last 5 years. Their meetings and interaction with the NGO were quite frequent. The NGO evaluates and monitors the activities quite closely, and even field visits were made wherever necessary during the program's implementation.	PRI members - The NGO was very efficient in its work. The organization started their work only after meeting them. The NGO staff used to visit the field every 2-3 days to supervise the activities. They made residents aware of the issues and also suggested agreeable and feasible solutions. They are hopeful that NGO will stay in touch with them through the company. Farmers' group - the participants were only able to tell that NGO staff used to take follow-ups during visits made in the village.	
Skill Development & Livelihood Enhancement	SHG - They used to meet with IDF staff once or twice every month. IDF staff could easily reach out via phone whenever SHG members require any help or assistance.	SHG - The NGO staff used to visit them regularly, but after COVID-19 pandemic, they have only once. They usually share the information with the NGO members.	
Health & Sanitation	Adolescents' group - The contact person from the NGO met the group multiple times during meetings. They also made follow-up visits at least 2-3 times. The NGO monitors their activities; however, they shared no plan of activities with the group.		
Education	School Principal & Teacher - They met NGO staff many times during the implementation of the HRDP in their schools. The NGO monitored activities, collected information on the activities, and provided additional support on activities being implemented whenever required. The NGO also shared the plan of activities. The designated NGO person stayed in contact post-implementation of the activities and did follow-up visits also.		

Domain	Effectiveness - Assessment findings					
Cluster	Bihar-cluster	Maharashtra-cluster				
Cluster	Findings of Qualitative Assessment	Findings of Qualitative Assessment				
Canalysian	Based on the interaction with beneficiaries and stakeholders, it is	clear that the NGO has been effective and has stayed in touch				
Conclusion	with the beneficiaries and stakeholders to monitor progress and p	rovide support.				
Recommendations	observed the changes taking place within the implement stakeholders throughout the intervention period. Based or assumed that whatever changes or impact observed had However, there was a difference in strategic approach between based targets for the overall project, it was not possible to and delivered changes as per a defined strategy. Based on • All interventions or strategies adopted should have a would allow the intervention to be monitored and ensemble of the should be a uniform follow-up strategy for each shared with all beneficiaries and stakeholders. Having	specific timeline with goals and achievable milestones. Such rigor sure that targets are met on time to achieve the expected impact. ach intervention, and visitation or follow-up strategies should be g a uniform strategy allows monitoring of activities and provides a and beneficiaries over a more extended period. Monitoring and				

D. Convergence

Convergence was assessed through qualitative assessment in terms of how well has the program used the existing resources from the government policies/schemes wherever applicable. The key observations are:

Domain	Convergence - Assessment findings			
Cluster	Bihar-cluster	Maharashtra-cluster		
Cluster	Findings of Qualitative Assessment	Findings of Qualitative Assessment		
	PRI members - Both the respondents were unaware of the fact	PRI members - Both the respondents were unaware of the fact		
Natural Resource	that whether the activities implemented in their villages under	that whether the activities implemented in their villages under		
Management	HRDP also utilized benefits under existing Government policies/	HRDP also utilized benefits under existing Government policies/		
	schemes.	schemes.		

Domain	Convergence - Assessment findings	
Cluster	Bihar-cluster Bihar-cluster	Maharashtra-cluster
Cluster	Findings of Qualitative Assessment	Findings of Qualitative Assessment
	Farmers' group – The group neither avails any such benefit of govt schemes nor has any information regarding the same. There was no FPO within their village, nor did the farmers have any information about it.	Farmers' group - Similarly, a vague response was obtained when enquired about the convergence with government schemes. However, as per respondents, the works done related to agriculture were carried by the agriculture department.
Skill Development & Livelihood Enhancement	SHG - They did not get any support from the Government institute and received only training and funding from IDF for mushroom cultivation and other associated activities. After the arrival of IDF, every member of SHG has opened their bank account, which was not the case before HRDP. Thus, it could be inferred that HRDP intervention has resulted in linking SHG members with the banking services.	SHG - Regarding convergence with the Government schemes, no clear response is obtained. However, as per the participant, they had received Rs. 1500 for their SHG.
Health & Sanitation	ANM - When enquired about convergence with government policies/ schemes, a discreet response was obtained from the respondent. According to her, health interventions under HRDP were capable enough to reduce the number of NCDs in the last two years due to early screening of the conditions in health camps followed by awareness among village people to monitor themselves to keep a check on their health status. AWW - The respondent failed to provide any information related to the convergence of HRDP with Government policies and	
Education	schemes wherever applicable. School Principal & Teacher - Mixed response was obtained regarding the convergence of HRDP interventions in schools with Government policies/ schemes. No response was obtained from one of the respondents, while as per other respondents, this	School Principal & Teacher - No response was obtained regarding this.

Domain	Convergence - Assessment findings	
Cluster	Bihar-cluster	Maharashtra-cluster
Cluster	Findings of Qualitative Assessment	Findings of Qualitative Assessment
	program was able to utilize benefits such as scholarship schemes for poor students in their schools.	
Financial and Digital Literacy	Quantitative findings – Only 18% of the respondent knew about various Government and social schemes, and only 15% knew how	Quantitative findings - 52% of the respondents were aware of various government schemes and benefits, but only 15% knew
3 11 11 17	to access or avail them.	how to access the schemes or avail them.
Conclusion	In terms of "Convergence," most positive response was observed in the "financial and digital literacy domain" where beneficiaries were now more aware of the banking services available and how to access these services. Beneficiaries in both Bihar and Maharashtra cluster were also made aware of various different government schemes and were provided information on how to access these schemes. Moreover, activities like health camps within the villages, active support for livestock (health camps for livestock), promotion of adopting schemes for adopting sanitation practices (IHHL schemes), and engaging relevant government officials or departments (Dept. of agriculture; Dept. of Health) were some of the key activities done by the NGO partners to coverage existing government services and resources to the intervention clusters. Overall, most activities involving convergence were at the level of the NGO partners, where activities were supported by external stakeholders. However, at the individual beneficiary level, most beneficiaries were either not aware of existing schemes or benefits in domains beyond "financial and digital literacy" and were not linked with any applicable schemes or benefits.	
Recommendations	 Convergence with existing schemes is an essential step in utilizing or leveraging the existing resources available within the government system. Additionally, linking services and schemes would allow the villages to be more independent and help support the sustainability of the intervention. Our recommendations are: A communication strategy needs to be developed to make all stakeholders and beneficiaries aware of the possible benefits/schemes they can avail in all applicable domains. A mechanism needs to be placed along with monitoring to ensure that all eligible beneficiaries are linked to schemes. This includes any specific intervention. 	

E. Sustainability and Replicability

Sustainability and replicability were assessed in terms of; how well the projects will sustain after the exit of HDFC Bank from the respective regions? How much replication of the project activities has been achieved inside and outside of the target villages?

Domain	Sustainability and Replicability - Assessment findings	
Cluster	Bihar-cluster Bihar-cluster	Maharashtra-cluster
Cluster	Findings of Qualitative Assessment	Findings of Qualitative Assessment
Natural Resource Management	PRI members - The IDF NGO provided them with guidance for all the development-related activities, and they believed that these changes would be sustained within the village. This program should also be replicated in other villages, and the focus should be on farmers and schools. Farmers' group - No specific response was obtained from the farmers' group regarding the sustainability and replicability of the interventions under HRDP.	PRI members - Sustainability of activities will vary from intervention to intervention. Benefits due to the construction of dams will last. In contrast, solar energy-related products may get damaged and require regular maintenance. However, they were hopeful that these could be maintained and repaired if they received support from Gram Panchayat and village residents. According to both respondents, these activities should be replicated in other villages also.
Skill Development & Livelihood Enhancement	SHG - This program has benefitted the members of SHG and the other beneficiaries such as farmers, women, adolescent girls, and school children in the intervention region. All respondents agreed that this program should be continued in their area and should be replicated in other areas.	PRI members - The company established by NGO will continue while SHGs could stop working after 5 to 10 years.
Health & Sanitation	ANM - Support of NGOs is still very much required for this program to continue. AWW - With the efforts of NGO staff under HRDP, they got a path and guidance to work on. This program is sustainable as it made beneficiaries more aware and self-reliant. The respondent agreed that this program should continue in their area and, if possible, be replicated in other areas. This program should also be replicated to other villages as well for better health outcomes.	School Staff – As per the beneficiaries, management committee have been set up to provide support and guidance to all future waste management, hand washing and sanitation practices within the school. The committee will oversee if all intervention within the domain is maintained and future students and teachers are trained on good practices.
Education	School Principal & Teacher - A mixed response was obtained when asked whether changes were made and their impact would be sustained in their schools and education in the absence of the	PRI members - As per one PRI member, the activities implemented in schools will definitely last for 10-15 years.

Domain	Sustainability and Replicability - Assessment findings	
Cluster	Bihar-cluster	Maharashtra-cluster
Cluster	Findings of Qualitative Assessment	Findings of Qualitative Assessment
	NGO/HRDP team. As per one respondent, changes such as Smart Classes, beautification of the schools, waste management, and hygiene practices would be able to sustain even in the absence of NGO. While according to another respondent, active support of NGO staff would be required for few days for the changes to sustain.	School principal & teacher - the NGO has established various mechanisms to make these changes more sustainable. A management committee has been set up in this regard. There are online meetings every month with NGO staff. The changes such as hand washing will last long. However, schools will require regular repair and painting. These activities should be replicated in other schools as well.
	Both the respondents agreed that these activities in their schools under HRDP were very beneficial for students, teachers, and education and should be replicated in other areas as well.	Parents - When enquired about sustainability and replicability, only parents were able to answer this. They agree that these changes will continue as such and they will keep on supporting such a program. This program should be implemented in other schools as well.
	When enquired about sustainability, NGO representative said that they had established various committees and transferred their	
	works through handover of the processes to relevant community bodies such as Village Development Committee (VDC), SHGs, SMCs etc. However, most stakeholders failed to provide such information.	
Conclusion	Based on the interaction with beneficiaries and stakeholders, there seems to be a divide of opinion between which interventions	
	would last and which won't. This divide is indicative of a lack of a clear exit strategy or a sustainability plan with beneficiaries and	
	stakeholders. Within the Maharashtra cluster, where schools have a management committee to sustain interventions, no such	
	structured mechanism was identified for other interventions.	
	Based on the findings, we have the following recommendation:	
Recommendations	A structured and detailed exit strategy needs to be made for each intervention. The strategy at minimum should include the	
	following key points:	
	 The key members/group who will maintain the intervention or how the process will be maintained; 	
	 How to monitor progress and identify gaps 	
	 Whom to contact when there are issues and gaps or where the reporting can be done; and 	

Domain	Sustainability and Replicability - Assessment findings	
Cluster	Bihar-cluster Bihar-cluster	Maharashtra-cluster
	Findings of Qualitative Assessment	Findings of Qualitative Assessment
	 What support can be availed from the existing government systems, any non-state actors, implementing NGO or even 	
	the HRPD project team. Details on the type of support like funds or technical expertise, or legal support need to be highlighted.	
	 Before exit, regular meetings should be done to make all stakeholders and beneficiaries aware of the existing strategy, additionally, a weaning-out period should be kept to ensure a smooth transition away from direct support. 	

Other Key Recommendations

As part of the assessment, extensive interactions were done with key stakeholders and beneficiaries. Based on the interaction, the table below compiles some of the key recommendations provided by the interviewee.

Other key recommendations as per stakeholders	
Bihar cluster	Maharashtra cluster
PRI members - They faced minimal challenges during the implementation of the HRDP. Village residents were cooperative and listened to them very carefully. The NGO staff provided solutions to problems such as water availability for irrigation purposes, unemployment etc. However, there is a need for more improvement in education and making poor people more self-reliant.	PRI members - The important recommendations were the organization of more health camps for regular check-ups, provision of medications, and marketing of products of SHGs.
School Principal & teacher - There were some challenges, such as training weak students through remedial classes and improvement in the content of the smart class materials. There is a requirement of more time to change the attitude of the people.	School Principal & teacher - As per the respondent, minor problems are part of regular processes, and they are capable of solving these by themselves. But NGOs provided support wherever required. The recommendation was the provision of funding support.
ANM - Current program was quite effective in making changes in the lives of people and addressing their health concerns. However, the program should continue so that it will benefit the maximum number of people.	

Other key recommendations as per stakeholders	
Bihar cluster	Maharashtra cluster
AWW - There should be more focus on increasing awareness of beneficiaries and if possible, also provide consultancy services regarding family planning.	
Farmers' group - The project should continue as there is a need to register farmers in FPOs, and the NGO can contribute a lot in making farmers aware of FPOs. One of the major challenges they faced was difficulty in understanding new concepts that are unconventional and very different from traditional farming techniques. But with time, they become comfortable about these interventions as they have access to the NGO staff for their support whenever needed.	Farmers' group - According to participants, the main challenge they face is related to funds. Also, it is challenging to convince people to attend some training or make any monetary contribution towards joint activities. Hence, it isn't easy to implement any group activity. There is a need to encourage and motivate people regarding the same.
The important recommendations emerged from the discussions: there is a need for increasing production of medicinal crops, soil investigation for nutrient deficiency, and improvements in cow breeding for more milk production.	
SHG - They faced challenges mostly in day-to-day activities, such as the members are less in number, and most tasks were required to be done as a group activity. Sometimes, members do not turn up in the meetings due to issues such as running household errands, not feeling well etc. Also, some members were not permanent and frequently backed out of the group. In terms of recommendations, members said that they should also be taught about animal rearing practices such as poultry as a part of SD&LE activities.	SHG - According to participants, they were faced with many difficulties during the implementation of the program. Firstly, it was difficult to make people understand that this project is for their benefit and put in lots of effort to convince them in this regard. The staff had to make home visits to convince people. There was a lack of cooperation among members. The process of shareholders also took time, and they had to show some tangible benefits for the people. The equipment given to members, such as a machine for masala making and idli batter grinding machine, is not used by the members and has remained unutilized so far. Members are not ready to share their equipment with other families. To the assessment team, this highlights the problem that individualistic approach for intervention can create problem. Thus, it's recommended that interventions should be planned that are more widespread and catering to larger needs.

Other key recommendations as per stakeholders					
Bihar cluster	Maharashtra cluster				
Adolescent girls' groups faced challenges such as non-availability of room for stitching centre, lack of coordination, fights/ quarrels among members/ peers, etc. However, with the efforts of IDF NGO, these challenges were resolved. The important recommendation is that this program should be replicated in other villages also.	any challenges, but they said that HRDP should focus on - 1. Vocational training; 2. Fittings of light/electricity bulb in main areas/ chowks; 3. Benches				

Holistic Rural Development Index (HRDI) of individual clusters

Typically, the HRDP interventions are implemented across various geography in a cluster format. The cluster could be defined as a group of villages with a certain homogeneity level within themselves. The uniformity within villages is either due to the location of villages, population profile including socioeconomic background, or even environmental status. Within the current assessment, two such clusters, one in Bihar and the other in Maharashtra, were assessed for the overall impact the HRDP interventions made within the two regions.

The assessment was complex as different partners handled both the clusters. Despite having broad themes to work on, they implemented interventions specific to their cluster, further specific to the villages in the cluster, and some activities specific to the individual or group of individuals within the village. Due to the current implementation strategy, getting a uniform picture of the overall impact made and even comparing performance within the cluster posed a challenge.

The Holistic Rural Development Index (HRDI) was developed for this specific purpose to enable us to understand the overall change that has taken place within a cluster. Additionally, the HRDI can compare clusters to know which regions have performed better than the other despite the differences in the implementation strategies. The HRDI is, therefore, a composite index developed to measure and rank the clusters and thereby the NGO partners based on their performances on key outcome indicators across these domains

HRDI Indicators

Overall, the HRDI is composed of indicators across the 4 key domains, which are:

- A. Natural Resource Management (NRM)
- B. Health and Sanitation (H&S)
- C. Skill Development and Livelihood enhancement (SDLE), and
- D. Education

To calculate the HRDI select indicators will be taken under each domain to calculate the overall score for the specific cluster. As both clusters under assessment have different intervention strategies, thus the table below highlights the common and different indicators within the cluster that would be used for calculations.

Domain	Selected Indicators			
Domain	Bihar Cluster	Maharashtra Cluster		
	Average expenditure on fertilizer per acre	Average cost of fuel usage for household		
	on farm in a year	purposes in a month		
	Average output of main produce in farms	Average Output for the main produce in		
NRM	in a year	a year		
INITIVI		No. of beneficiaries that were benefitted		
	No. of Beneficiaries think that they were	from the interventions of solar street		
	benefitted from the solar irrigation	lights installation and solar handheld		
		battery lights		
	No. of Beneficiaries with access to safe	No. of Beneficiaries with access to safe		
H&S	drinking water	drinking water		
паз	No. of Beneficiaries that reported using	No. of Beneficiaries that reported using		
	toilets	toilets		

Domain	Selected Indicators				
Domain	Bihar Cluster	Maharashtra Cluster			
	No. of Beneficiaries that benefitted from the medical camps	No. of Beneficiaries that benefitted from the medical camps			
SDLE	Average earnings from farming due to intervention in a year	Average earning due to farming			
SDLE	Average income generated due to primary livestock	Average income from livestock produce per month			
	Average monthly attendance of students	Average monthly attendance of students			
Education	in a year	in a year			
	Performance of the child attending	Performance of child attending school in			
	school in grades or percentage	grades or percentage			

Approach and Methodology

To calculate the index all 11 indicators for the Bihar cluster and 10 indicators for the Maharashtra cluster were converted into discreet variables such that they could be measured between 0 and 1. Indicators such as productivity and income measured on a continuous scale were converted to discrete variables by setting a cut-off. The 50th percentile of these indicators at baseline was chosen as the cut-off point. Thus, a change in the indicator could be captured by recording the proportion of beneficiaries above the cut-off at two distinct points in time. Since no formal baseline was done thus, the retrospective data obtained from the respondents will be taken as the closest value for a baseline.

Ideally, for any long-term intervention project, a baseline assessment is done to understand the underlying status. But in the absence of baseline data, retrospective data, albeit with lower accuracy, can be used to estimate change within a region. There are specific indicators for the current HRDI calculation for which the retrospective data is unavailable, such as "piped source of drinking water." But despite the lack of baseline value, it is safe to assume that there would have been some households with 'piped" drinking water sources. Thus, for such indicators, we will consider the baseline and the endline value as the same. Thus, effectively removing them from the assessment when comparing the change in the index between baseline and endline. Conversely, the indicator will be used to calculate the current or baseline index value for other comparisons.

Additionally, for indicators that can't have any baseline value, like for solar energy interventions that were utterly unique and never before introduced, we will consider the baseline cut-off proportion as "0".

Indicator Weights

To make HRDI scores comparable a scale was developed. An equal weightage was assigned to each domain and then to the respective indicators to calculate the scale.

The summary indicator table with change to be measured and weights assigned are detailed in the tables below:

For Bihar

Domain	Indicator	Positive change if	Weights Assigned
NRM	Average expenditure on fertilizer per acre on farm in a year	Increase in % people whose expenditure decreased from baseline cut-off	0.08

Domain	Indicator	Positive change if	Weights Assigned
	Average output of main produce in farms in a year	Increase in % people whose main produced increased from baseline cut-off	0.08
	No. of Beneficiaries think that they were benefitted from the solar irrigation	%people who reported significant benefits due to intervention	0.08
	No. of Beneficiaries with access to safe drinking water	%people who have access to safe drinking water ¹	0.08
H&S	No. of Beneficiaries that reported using toilets	%People that are using toilets ² with flush	0.08
	No. of Beneficiaries that benefitted from the medical camps	%people who reported significant benefits due to medical camps	0.08
CDIE	Average earnings from farming due to intervention in a year	Increase in %people who had increased earnings due to farming from baseline cut-off	0.13
SDLE	Average income generated due to primary livestock	Increase in % people who had increased earnings due to livestock from baseline cut-off	0.13
	Average monthly attendance of students in a year	%children that have increased the number of days attending school from baseline cut-off	0.13
Education	Performance of the child attending school in grades or percentage	%children that have improved their performance from baseline cut-off (for children graded in % scores only)	0.13

¹ Piped water into dwelling/yard/plot, public tap/standpipe, tube well or borehole, protected dug well, protected spring, rainwater, community RO plant

For Maharashtra

Domain	Indicator	Positive change if	Weights Assigned
	Average cost of fuel usage for household purposes in a month	Increase in % people whose expenditure decreased from baseline cut-off	0.08
NRM	Average Output for the main produce in a year	Increase in % people whose main produced increased from baseline cut-off	0.08
	No. of beneficiaries that were benefitted from the interventions of solar street lights installation and solar handheld battery lights	%people who reported significant benefits due to intervention	0.08
	No. of Beneficiaries with access to safe drinking water	%people who have access to safe drinking water ¹	0.08
H&S	No. of Beneficiaries that reported using toilets	%People that are using toilets ² with flush	0.08
	No. of Beneficiaries that benefitted from the medical camps	%people who reported significant benefits due to medical camps	0.08

² Own, shared, public/community toilet

Domain	Indicator Positive change if		
SDIE	Average earning due to farming	Increase in %people who had increased earnings due to farming from baseline cut-off	0.13
SDLE	Average income from livestock produce per month	Increase in % people who had increased earnings due to livestock from baseline cut-off	0.13
Education	Average monthly attendance of students in a year	%children that have increased the number of days attending school from baseline cut-off	0.13
	Performance of child attending school in grades or percentage	%children that have improved their performance from baseline (children getting grades A+ to A-)	0.13

¹ Piped water into dwelling/yard/plot, public tap/standpipe, tube well or borehole, protected dug well, protected spring, rainwater, community RO plant
² Own, shared, public/community toilet

Results

For Bihar

Domain	value* Value*		Change**	HRDI Baseline	HRDI Endline		
	Average expenditure on fertilizer per acre on farm in a year	Increase in % people whose expenditure decreased from baseline cut-off	14007 (INR)	14048 (INR)	0.3%	0.04	0.05
NRM	Average Output for the main produce in a year	Increase in % people whose main produced increased from baseline cut-off	1198 (Kg)	1383 (Kg)	15.4%	0.03	0.05
	No. of beneficiaries that were benefitted from the interventions of solar irrigation	%people who reported significant benefits due to intervention	0%	25%	25%	0.00	0.02
	Sub-total index valu	e for NRM				0.07	0.12
	No. of Beneficiaries with access to safe drinking water	%people who have access to piped source of drinking water	94%	94%	NA	0.08	0.08
H&S	No. of Beneficiaries that reported using toilets	%People that are using toilets with flush	30%	30%	NA	0.03	0.03
	No. of Beneficiaries that benefitted from the medical camps	%people who strongly agree that they have benefitted from medical camps	0%	9%	9%	0.00	0.01
	Sub-total index valu	ie for H&S				0.11	0.12
	Average earning due to farming in a year	Increase in %people who had increased earnings due to farming from baseline cut-off	15824 (INR)	22588 (INR)	42.7%	0.06	0.07
SDLE	Average income from livestock produce per month	Increase in % people who had increased earnings due to livestock from baseline cut-off	3943 (INR)	4462 (INR)	13.2%	0.04	0.06
	Sub-total index valu	e for SDLE				0.10	0.13

Domain	Indicators	Positive Change	Baseline value*	Current Value*	Change**	HRDI Baseline	HRDI Endline
	Average monthly attendance of students in a year	%children that have increased the number of days attending school from baseline cut-off	17 (days)	20 (Days)	17.6%	0.06	0.11
Education	Performance of child attending school in grades or percentage	%children that have improved their performance from baseline cut-off (for children graded in % scores only)	61% (Average score)	70% (Average score)	9%	0.08	0.9
	Sub-total index value for Education						0.2
		Total HRDI for Bihar				0.42	0.57

^{*}Values adjusted by removing outliers

For the Bihar cluster, the HRDI score for "Baseline" is **0.42**, and "Endline" is **0.57**. Thus, overall, there is a **0.15 change** (36%) in the index scores from baseline to endline. Looking at the individual domains, most gain were made in Education (83% increase in index) and in NRM (71% increase) (Fig A.1).

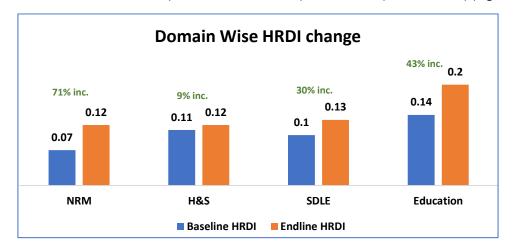


Fig A1. Domain wise change in HRDI in Bihar

For Maharashtra

Domain	Indicators Positive Change Baseline Current value* Value*		Change	HRDI Baseline	HRDI Endline		
	Average cost of fuel usage for household purposes in a month	Increase in % people whose expenditure decreased from baseline cut-off	1019 (INR)	850 (INR)	-16.6%	0.04	0.05
NRM	Average Output for the main produce in a year Increase in % people whose main produced increased from baseline cut-off		3314 (Kg)	3843 (Kg)	16.0%	0.04	0.05
INVIVI	No. of beneficiaries that were benefitted from the interventions of solar street lights installation and solar handheld battery lights wpeople who reported significant benefits due to intervention		0%	35%	35%	0.00	0.03
	Su	b-total index value for N	RM			0.08	0.14

^{**}Green code for increase; red code for decrease

Domain	Indicators Positive Change Baseline value* Change Change		HRDI Baseline	HRDI Endline			
	No. of Beneficiaries with access to safe drinking water	%people who have access to piped source of drinking water	64%	64%	NA	0.05	0.05
H&S	No. of Beneficiaries that reported using toilets	%People that are using toilets with flush	32%	32%	NA	0.03	0.03
	No. of Beneficiaries that benefitted from the medical camps	%people who strongly agree that they have benefitted from medical camps	0%	38%	38%	0.00	0.03
	Su	ıb-total index value for H	I&S			0.08	0.11
	Average earning due to farming in a year	Increase in %people who had increased earnings due to farming from baseline cut-off	66333	83667	26.1%	0.06	0.07
SDLE	Average income from livestock produce per month	Increase in % people who had increased earnings due to livestock from baseline cut-off	5277 (INR)	6478 (INR)	22.8%	0.06	0.09
	Su	b-total index value for S	DLE			0.12	0.16
	Average monthly attendance of students in a year	%children that have increased the number of days attending school from baseline cut-off	18 (Days)	24 (Days)	33.3%	0.06	0.12
Education	Performance of child attending school in grades or percentage	%children that have improved their performance from baseline (children getting grades A+ to A-)	27% (children)	42% (Children)	15%	0.06	0.05
	Sub-	total index value for Edu	cation			0.09	0.17
		otal HRDI for Maharash	tra			0.37	0.58

^{*}Values adjusted by removing outliers

For the Maharashtra cluster, the HRDI score for "Baseline" is **0.38**, and "Endline" is **0.58**. Thus, overall, there is a **0.21 change** (57%) in the index scores from baseline to endline. Looking at the individual domains, most gain were made in Education (89% increase in index) and in NRM (75% increase) (Fig A2).

^{**}Green code for increase; red code for decrease

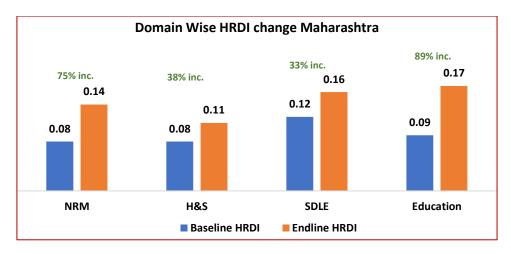


Fig A2. Domain wise HRDI change in Maharashtra

Summary and conclusion

Looking at the domain wise performance in both cluster most improvement was observed in Education and NRM (Fig. A1; Fig. A2). Based on the change in HRDI from baseline to endline, the Maharashtra cluster has performed better than Bihar. While at the baseline, the Bihar cluster (0.42) had a better score than Maharashtra (0.37), at the endline, the difference in HRDI was marginal with Maharashtra cluster scoring at 0.58, versus the Bihar cluster 0.57 (Fig. A9). Overall, the changes in the Maharashtra cluster outperform the Bihar clusters and would be ranked higher in performance.

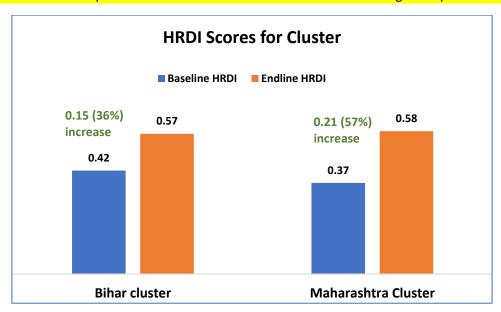


Fig. A3. HRDI scores for intervention clusters at baseline and endline

HRDP Impact in Bihar

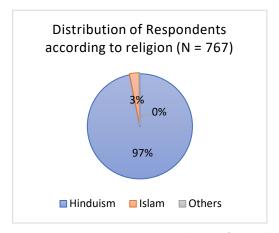
Household Details

The basic profile of respondents

A total of 767 households were surveyed within district Samastipur of Bihar. Out of the total 767 respondents, 60% were males with an average age of 41 years, and the remaining 40% were females of an average age of 38 years (Table 1). With regards to religion, a majority of the households were Hindu (97%) (Fig 1) and within social groups (caste), a majority belong to either OBC (47%) or SC (40%) (Figure 1). Out of the total respondents, 67% of respondents were the primary earners within the household, and for those respondents who were not primary earners, 74% were the spouses of the primary earner (Figure 3).

Table 1. Distribution of respondents according to gender and age

S No	Gender Distribution			Condor	Distribution		Age distribution	
S. No.	Gender	Count (N)	%	Average	Maximum	Minimum		
1	Females	303	40%	38	65	20		
2	Males	464	60%	41	80	18		



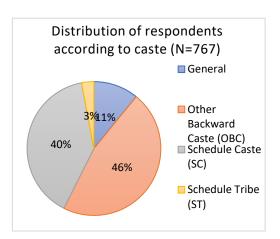


Figure 1. Distribution of respondents according to religion and caste

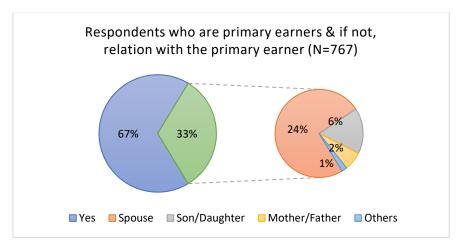


Figure 2. Respondents who are primary earners & if not, relation with the primary earner

Family details

On an average, every household had a minimum of 5 members, and 3 members were below 18 years of age within the family (Annex 1). When enquired, 98.4% of the households were permanent residents in the village, and out of those who were not permanent residents, a majority had been residing for the last 1-5 years (Annex).

It was observed that most of the respondents were exposed to the interventions under HRDP as they were permanent residents of the village. Additionally, a majority of the respondents were either the primary earners themselves or their spouses. Thus, they were the ideal group to help us understand the overall changes within the household and the village due to HRDP interventions. These findings were further substantiated during the qualitative assessment of the Farmers' group, SHGs, and Parents of school-going children as most participants of FGD were aware of the interventions regarding NRM, SD&LE, Education, and Health implemented under HRDP.

'There has been a lot of work done (by the NGO), like Mushroom cultivation, production of organic manure for farming, painting of schools, solar irrigation plant set-up, provision of smart classes for children, etc.'

One of the respondents from SHG

Socioeconomic details

Socioeconomic status (SES) plays a crucial role in the outcome of any project. As HRDP aims to create a holistic developmental environment for both individual households and the villages as a whole, it is essential to understand the current SES.

Education status

78% of primary earners (within the family) had been to school. Out of those who attended school, most primary earners (37%) had obtained their education between classes 5th to 10th (Figure 3). When enquired about other adult family members, 78% of the households did not have any other member attending school (Annex 1).

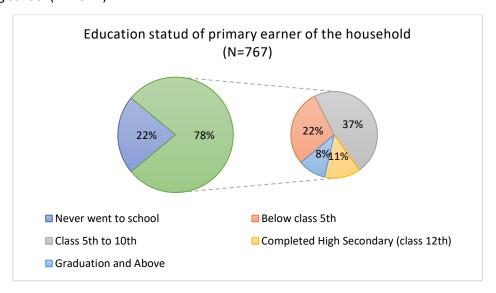
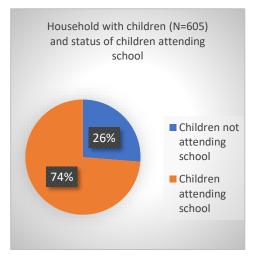


Figure 3. Education status of primary earner of the household

Overall, there is a shortage of educated adults within the villages except for the primary earners. Despite the gap, when looking at households that have children (n=605), a majority (74%) are sending them to school (Figure 4). Even within the families that did not have educated primary earners, most of them (78%) are sending children to school (Figure 4.1). Thus, there is an indication that, despite adult education status, education of children has been rightly promoted within the villages, and HRDP intervention that was aimed towards improving schools and education standards has definitely made an impact within these villages.



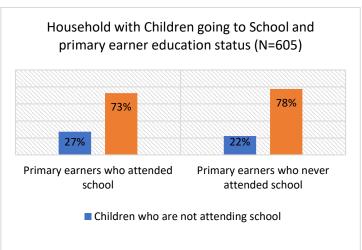


Figure 4. Households with children and status of children attending school

4.1. Household with children going to school and primary earner education status

These observations were supported when interviewing children attending school and their parents. The parents were sending their children to schools and were fully aware of the benefits of education. The participants of the FGD of school-going children also wished to pursue higher education and get aspired for good jobs. Even during our visit to the schools (currently operating in a limited capacity due to pandemic) had smart class facilities and related infrastructure that helped in providing quality education (Image 1).

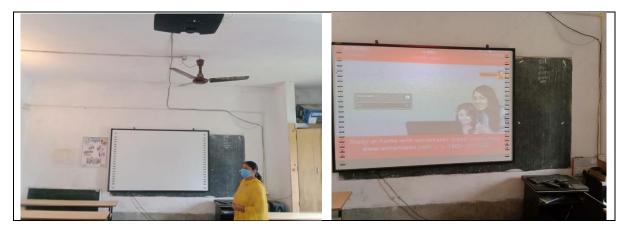
'Education will make their children self-reliant, and they don't have to depend on others as they can earn income for themselves.'

- One of the participants of parents' group

'Education helps us to stand in our own feet.'

- One of the participants of children's group

Image 1: Smart Classes established in Bihar cluster (Guarana Secondary School)

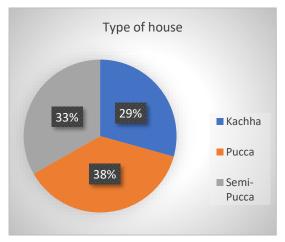


Economic status

Work Status

When assessing the economic status, the focus was on understanding the type of houses the family lives in, if they possess any land, the work status of the primary earner, and sources of income. Additionally, to understand if there had been any change in household income and farm or livestock practices, information was collected and assessed for status before and after the HRDP project.

Upon assessment, it was found that nearly 38% of households own a pucca house (Fig. 5). Additionally, 50% of the households were landowners (Fig. 5), where 86% were marginal farmers, i.e., owning a land less than 1 hectares, and 11% were small farmers, i.e., holding a land between 1-3 hectares (97%) (Annex 1). A majority (92%) of the landowners reported no change in their holdings in the last one to two years. Some landowners (5%) even informed an increase in landholding size by purchasing new land because of increased income (Annex 1) during the HRDP intervention period.



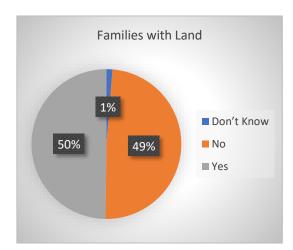


Fig. 5. Type of house and status of land holdings

When questioned about the work status and sources of income, a majority of primary earners were daily wage labourers (66%) (Figure 6).

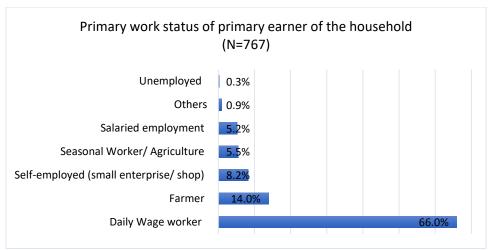


Figure 6. Primary work status of primary earner of the household

Additionally, on inquiring, nearly 35% of the households own livestock. Out of them, around 50% were engaged in commercially selling livestock or goods produced from them (Annex 1). Moreover, besides primary earners, nearly 27% of the household had a family member engaged in farming activities besides the primary earner. Thus, out of the total households (N=767), 37% were found to be involved in farming activities (Annex 1).

Household Income (All values in INR)

When enquired about family income status, there has been a decrease in the number of households whose family income lies in the range 5000 or less (Fig. 6.1). At the same time, for families with income in the range between 5000-10000, 10000-20000, 20000-30000, and 30000-40000, there has been an increase.

Thus, families with lower income to higher income brackets have shifted to higher income brackets under the HRDP intervention period or the last three years of intervention (Table 2).

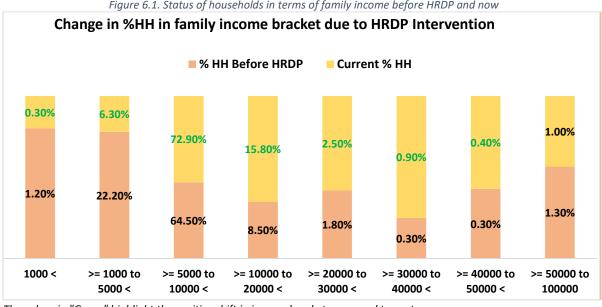


Figure 6.1. Status of households in terms of family income before HRDP and now

The values in "Green" highlight the positive shift in income bracket compared to past

Further, when households with farmers (280) enquired about the frequency of making earnings from the sale of agricultural produce in a year, there has been a significant increase in farmers making earnings 2-3 times in year from sale of agricultural produce now (73%) compared to before HRDP (59%) (Fig. 7). Also, 22% of farmers who were not selling their produce before HRDP decreased to 15%. Thus, now more households have adopted farming under the HRDP interventions and have gained an additional source of income (Fig. 7).

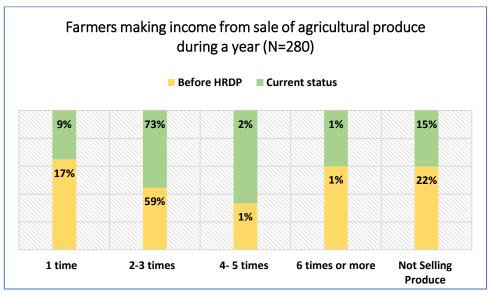


Figure 7. Farmers making income from the sale of agricultural products during a year

As farmers were one of the prime beneficiaries under the HRDP, and generation of alternate income sources was one of the key issues; we continued to investigate whether there were any such cases within the intervention villages. Upon inquiring, 20% of the farmers were engaged or had other sources of income (Fig. 8).

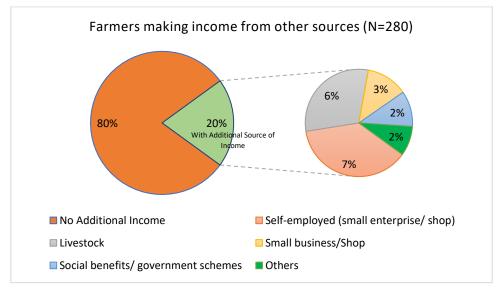


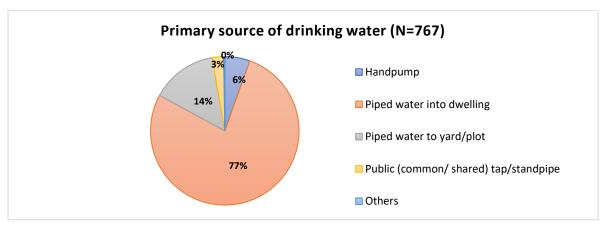
Figure 8. Farmers making income from other sources

As one of the critical objectives of the HRDP was to enable people within the village with new skills and livelihood opportunities, inquiry from the households was made in terms of any other members contributing to the household income; if yes, their source of income; and whether their earnings have increased in last 1-3 years. Upon examining, nearly 12% of the households reported that additional

members were contributing to the overall household income (Annex 1), and on an average, contributed about 11,210 INR (Annex 1). Currently, the majority of the additional family members (64%) were found to be engaged as daily wage workers, and some (11%) also started their own small shop/ enterprise within the village (Annex 1). Moreover, 51% of these additional members (who are contributing to household income) reported an increase in income in the last 1-3 years (HRDP intervention period) (Annex 1).

Amenities – Water and Sanitation

In terms of socioeconomic details, additional information was collected related to drinking water sources and type of toilet use. 77% of households had piped water into their dwelling as a source of their drinking water (Figure 9). In terms of type of toilet facility used by households, most households were using a latrine / toilet with flush pour/ flush to piped sewer system/ septic tank/ pit (26%) (Fig. 9).



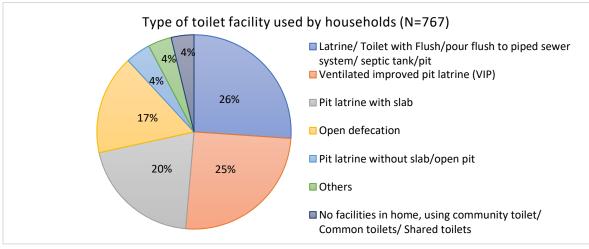


Figure 9. Primary source of drinking water and type of toilet facility used by households

One of the interventions under HRDP was promoting toilet use by residents of villages by facilitating the construction of toilets through financial assistance under the IHHL scheme. Upon inquiry, it was found that there were 118 households that had constructed toilets under IHHL scheme, and the majority of these (97%) had received additional incentives for constructing latrines under IHHL scheme (Annex 1).

Thematic domain wise Intervention and Impact

Under the HRDP, the interventions were designed and implemented for addressing needs assessed under specific thematic domains. To understand the domain-wise overall activities done and the

fundamental changes observed the assessment was done first to understand the "awareness" of people within the village regarding the intervention. Out of those aware, next, we assessed the common interventions in which households were covered. Post-initial questioning, out of the total households that were aware, we asked for their opinion on the "relevance" and the overall "benefit" of the intervention. Lastly, out of the households that reported any benefit, the specific details of the benefits or impact were collected.

A. Theme I – Natural Resource Management (NRM)

In Bihar, NRM related activities included promotion of cluster-based vegetable cultivation, organic agriculture farming through vermicompost production, and promotion of irrigation through solar-powered generators.



NRM related to farming

Awareness of households and their coverage under activities for improving usage of natural resources related to farming



It was found that 51% of households were aware of the activities for NRM related to farming, such as cluster-based vegetable cultivation and organic farming through the production of vermicompost, and out of those who were aware, nearly 48% were covered under these activities (Annex 1).

Even PRI members during interviews reported that major activities under HRDP were targeted towards NRM and farmers. Similarly, most farmers' group members were also aware of HRDP due to their active discussions and engagements with the NGO staff. According to stakeholders, the primary targets were the farmers with a focus on improving knowledge and skills regarding good agriculture practices. The participants of FGD revealed that the promotion of organic farming based on vermicompost was a common intervention among the farmers.

'Dharmendra ji was the first point of contact for the entire farmer community to seek any information regarding program implementation.'

- One of the respondents of Farmers' group

Further, the secondary data obtained from NGO representatives revealed that 60 farmers were selected and given assistance for cluster-based vegetable cultivation along with orchard development with plantation of 200 lemon plants at a distance of 5 feet each.

Relevance

When asked about the relevance of these activities in terms of their perception, most households agreed that NRM activities related to farming were essential (little - extreme) for their household (85%) and village (97%) (Table 2).

PRI members substantiated these findings who agreed that activities implemented under HRDP by the NGO IDF were very much required for their villages. According to one of the PRI members, there was installation of solar pumps and introduction of vermicompost for farming which were not earlier present in their villages. It met the needs of the residents of the villages. Similarly, most participants of the farmers' group agreed that these interventions were very much required and allowed them to understand the concept of maximum utilization of natural resources for enhancing the yield of the crop.

Table 2. Relevance of activities of NRM related to farming (based on perception)

S. N	Relevance of the intervention	Activities essential household based of the respondent		Activities essential based on the opin respondent	•
0.	intervention	Count (N)	%	Count (N)	%
1	Can't Say/ Not Sure	75	16%	12	3%
2	Extremely essential	110	24%	183	39%
3	Little essential	69	15%	62	13%
4	Somewhat essential	69	15%	74	16%
5	Very essential	142	31%	134	29%
	Total	465	100%	465	100%

Impact

Upon inquiry, it was found that almost 43% and 23% of respondents agreed that they received significant benefits and some benefits, respectively from NRM related activities (Table 3).

S. No. The benefit of NRM-farming related interventions Count (N) % 1 Can't Say/ Not sure 40 10% 2 Little benefit 87 22% 3 No benefit 4 1% Significant benefits 4 170 43% 5 Some benefit 90 23%

Table 3. Benefits of organic agriculture based on the perception of the respondents

In terms of the type of benefits, 43% of respondents were benefited from an increase in types of vegetable cultivation (Figure 10).

391

100%

Total

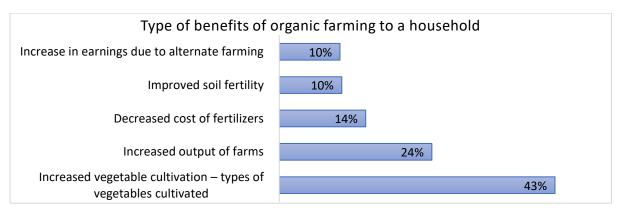


Figure 10. Types of benefits of organic farming to a household

Furthermore, it was found that currently, farmers were cultivating at least 4 types of crops which were only 3 prior to HRDP; and there was 11% decrease in terms of expenditure on fertilizer per acre on the

farm in a year (INR) after HRDP as compared to the pre-intervention period (Table 4). Both these findings should be considered as favourable for farmers and very well attributed to the activities of cluster-based vegetable cultivation and organic agriculture based on vermicompost. However, a 5% decrease in output of produce per acre of the farm in a year and a 57% decrease in the earnings due to vegetable selling compared to before HRDP. This decrease can be linked to external factors such as the impact of the COVID-19 pandemic and movement restrictions on market forces.

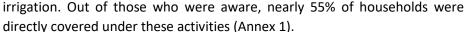
S. No.	Impact	, ,	Before HRDP intervention (Average estimates)
1	Type of vegetables cultivated by a household	4	3
2	Expenditure on fertilizer per acre on farm in a year (INR)	11066 (11% decrease)	12244
. ≺	Output of produce per acre of the farm in a year (in Kg)	3620 (5% decrease)	3786
4	Earning due to vegetable selling in a year (INR)	10067 (57% decrease)	15789

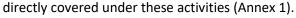
PRI members during interviews confirmed that the use of organic fertilizers had improved the fertility of the soil, and the Government was promoting the same. In some villages, there had been 100% adoption of organic farming practices by the farmers. Further, secondary information collected during NGO representative interview highlighted that a total of 100 vermi-pits were constructed across 10 villages in 3 financial years, and around 42 acres of land for cluster vegetable cultivation was done with vermicompost rather than chemical fertilizers. Although farmers were the primary beneficiaries of these activities, these can potentially benefit the environment positively in the longer run, such as improving soil fertility, reducing soil degradation, and enhanced local flora and fauna due to crop diversification.

NRM related to irrigation

Awareness of households and their coverage under activities for improving usage of NRM related to irrigation

53% of the households were aware of NRM activities related to irrigation, such as solar-power based





During interviews, PRI members and Government officials were fully aware of the activities related to the installation of solar pumps for irrigation purposes. Similarly, during interactions with farmers' groups, it was observed that most members installation and utilization of group-based solar irrigation systems.

Further, the secondary data obtained from NGO representatives revealed that under HRDP, unirrigated pockets of agricultural land were identified with the help of farmers' groups for the adoption of group solar irrigation methods.



Most respondents agreed that their household and village were benefitted from the solar-based irrigation (Table 5). Almost 46% of respondents were significantly benefitted from solar-based irrigation.

S. No.	Benefits to the households or the village due to solar irrigation based on the opinion of the respondents	Count (N)	%
1	Can't Say/ Not sure	28	7%
2	Little benefit	73	18%
3	No benefit	2	0%
4	Significant benefits	189	46%

5

Some benefit

Table 5. Benefits of solar-based group irrigation based on the perception of the respondents

When asked about specific benefits 58% of respondents said that solar pumps have made irrigation more convenient than traditional methods (Figure 11). When enquired about the cost of irrigation, it was estimated that on average, most respondents were paying 15% less costs now (INR 7247) due to solar-based group irrigation compared to before HRDP (INR 8373).

Total

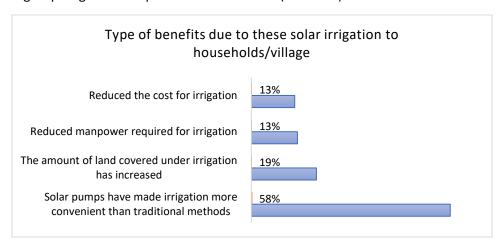


Figure 11. Type of benefits of solar-based group irrigation to households/village

These findings were supplemented with the interviews of PRI members and discussions with the farmers' group. According to PRI members, solar irrigation reduced the cost of irrigating land for farmers.

'Since, we belong to the Kushwaha belt, and we rely on vegetable selling majorly, due to solar pumps all that has happened is the cost has become low. Earlier, what used to be hourly payment has now dropped. For instance, we can understand it as what costed 30,000 earlier, the same work is done in 10,000 now.'

PRI member

118

410

29%

100%

Similarly, participants from farmers' group when enquired about the benefits of the group solar irrigation system informed that they were very much satisfied with this system as it has resulted in the dual benefits – reduction in cost of irrigation and enhanced quality of agricultural produce.

'After the implementation of this program, the irrigation cost has come down to more than half in comparison to what it used to be and likewise other practices are even cost friendly and more yielding than the previous ones.'

A respondent from farmers' group

B. Theme II – Skill Development and Livelihood Enhancement (SDLE)

In Bihar, the key activities implemented under the SDLE initiative were related to those of imparting knowledge and building capacities of farmers for agriculture and allied activities (livestock health management). Additionally, knowledge and building capacities of women Self-Help Groups (SHG) in terms of mushroom cultivation, mustard oil seller, paper plate making, stitching, etc., was also carried out.



SDLE - Agriculture/Farming

Awareness of households and their coverage under SDLE initiatives for agriculture/farming



46% of households were aware of the SDLE initiatives for agriculture/farming. Out of those aware, nearly 45% were covered directly under the intervention activities through training/ participation in the workshops (Annex 1).

Additionally, 57% of the households adopted modern farming equipment for ploughing (Figure 12) after undergoing training under SDLE.

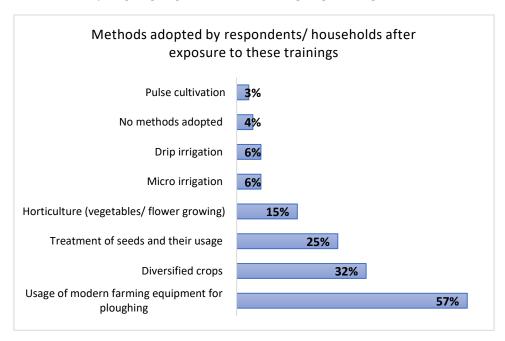


Figure 12. Methods adopted by respondents/households after exposure to these training

During the qualitative assessment, one of the PRI members said that major SDLE activities were targeted at – Farmers – in terms of their knowledge and skills regarding good agriculture practices. The participants of FGD revealed that various SDLE activities were carried with them as a part of farmers' group under HRDP. These include – orientation on soil nutrient management and use of fertilizers as per soil requirement; advanced irrigation and ploughing practices; training at the

agricultural institution about good agricultural practices; provision of HYV seeds, and availability of agriculture-based books for their knowledge and information.

Relevance

Most respondents agreed that these initiatives for imparting knowledge and building capacities of farmers were essential for their household (84%) and the overall development of their village (97%) (Annex 1).

Additionally, PRI members supported that the activities implemented under HRDP by the NGO were very much required for their villages as it met the needs of the residents of the villages. Moreover, farmers were given skill training and knowledge regarding organic farming, which they did not know earlier. Most participants of the farmers' group agreed that these interventions were very much required and allowed them to understand the concept of maximum utilization of natural resources for enhancing the yield of the crop.

Regarding SDLE activities, participants responded positively as due to this initiative, they got to know the difference between agriculture-based practices and livestock rearing practices. The program provided them expert advice and support whenever required. Moreover, the group also realized the importance of discussing farming practices among themselves. All these changes were further substantiated efforts for enhancing livelihood.

Impact

Upon investigation, almost 42% of respondents were significantly benefitted, and 21% of respondents reported receiving some benefits from SDLE initiatives related to agriculture (Annex 1).

When respondents were enquired about the type of benefits, 48% said that there is more efficient water usage for irrigation. 34% benefitted from the reduction in irrigation cost, and 18% benefitted from an increase in farm productivity. At the same time, reduction in farming costs due to modern methods was reported by 10% of respondents and improvement in earnings due to farming by 7% of respondents (Figure 13). Further, it was estimated that, on average, there was a 10% decrease in the irrigation cost after HRDP (INR 5613) as compared to before HRDP (INR 6147) (Table 6). On average, the productivity of primary produce per acre of land increased by 44%, earning from farming due to intervention in a year increased by 74%.

These findings were substantiated by the interviews of PRI members and FGDs of the farmers' group. According to PRI members, SDLE activities would have an impact on livelihood generation. Techniques like organic farming, vermicompost, and solar pump installation, have reduced the cost of farming, and crops could be grown at much cheaper rates. SDLE activities have made people find out a way to their income source. Moreover, as per the PRI members, the training imparted has enhanced many individuals' self-reliance within the village, especially the farmers. Thus, they believe even in unemployment situations, training like organic farming and vermicompost will ensure that the farmer can sustain himself and his family.

'With training like organic farming and vermicompost, no people (especially the farmer) will be left unemployed. People can use the techniques learned for self sustenance.'

-PRI Member, Taldashara

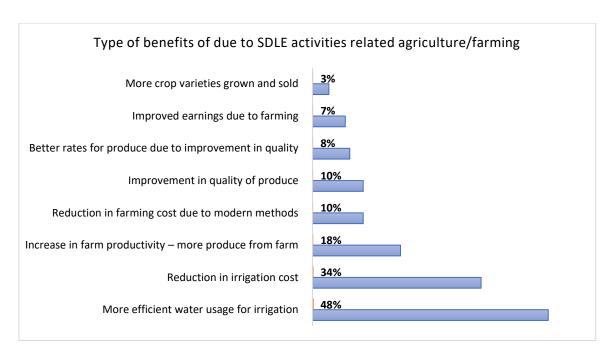


Figure 13. Type of benefits due to SDLE activities related to agriculture/farming

Table 6. Status of other indicators	- before and after HRDP
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S. No	Status of other indicators	Current status (Average estimates)	Before HRDP (Average estimates)	Change (% decrease or increase)
1	Cost of irrigation per acre land (Rs)	5613	6147	10% decrease
2	Productivity of primary produce per acre land	15255	10618	44% increase
4	Earning from farming due to intervention in a year	52001	29955	74% increase

All the interventions under NRM and SD&LE that were targeted towards farming and associated activities had decreased the overall investment by farmers in agriculture. Additionally, when enquired about the impact of these SDLE initiatives from farmers' groups, it was found that knowledge regarding judicial use of resources had resulted in the increased overall productivity of the farmland. The farming community was now engaged in discussions to build standard solutions for several challenges they faced earlier before HRDP intervention.

'After implementing this program, the irrigation cost has come down to more than half compared to what it used to be, and similarly, other practices are even cost-friendly and more yielding than the previous ones.'

A respondent from the farmers' group

These observations were also in line with the supplementary information obtained from the NGO representative. According to him, interventions such as availability of High yielding varieties of seeds to farmers, orientation and training of farmers in the farm-based knowledge centers, provision of agriculture-based books to farmers, use of tools such as Power Visor for vegetable cultivation have benefitted farmers from intervention and also nearly villages. These farmers-based initiatives benefitted directly 300 farmers and indirectly 400 farmers.

On an average, there has been a 50% - 70% increase in farmers' income from the base values. This observation came from comparisons of SRI paddy cultivation adopted under HRDP against traditional paddy cultivation before HRDP during Rapid Rural Assessment in 10 villages.

Program Coordinator, NGO

SDLE - Allied activities such as livestock nutrition and health management

Awareness of households and their coverage under SDLE initiatives for allied activities

43% of the households were aware of initiatives related to livestock. Out of those who were aware, 32% of them were covered directly under SDLE activities related to livestock management (Annex 1). The key SDLE activities under which households were covered were veterinary camp (92%), capacity building on livestock management/care (41%), and species breeding (22%) (Annex 1).



Similarly, during interviews with the farmers' group, a few members said that they also availed services of the camps for livestock health management. NGO representative interviews supplemented this information as nearly 70% of farmers in the intervention region owned livestock. Under HRDP, animal husbandry activities were organized at veterinary camps where government doctors provided services such as awareness about immunization, disease prevention and treatment, and distribution of medicines.

Impact

Upon inquiry from those covered under these activities, nearly 44% of respondents said that they were significantly benefitted and 26% said they had received some benefits (Annex 1). 72% of respondents said that there was an improvement in livestock health.

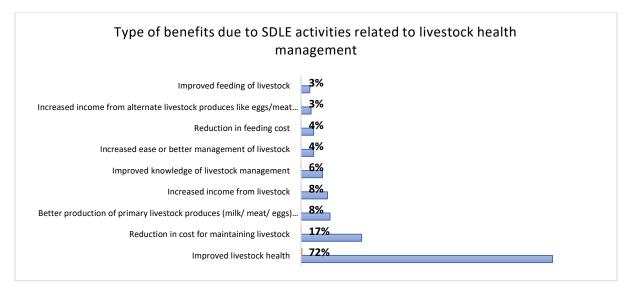


Figure 14. Type of benefits to households due to SDLE activities related to Livestock health management

Further, upon investigation about other indicators, it was found that on average, there was 4% decrease in the yearly cost of maintaining livestock, 41% increase in income generated due to alternated livelihood produce, and 13% increase in income generated due to primary livestock (Table 7).

Table 7.. Status of other indicators before and after HRDP

S. N o.	Status of other indicators	Current status (average estimates)	Before HRDP (average estimates)	Change (% increase or decrease)
1	Yearly cost of maintaining livestock	4156	4325	4% decrease
2	Income generated due to alternate livestock produce	4571	3250	41% increase
3	Cost for feed for primary livestock in a month	4310	3844	12% increase, and it is bound to be influenced by demand & supply side existentialists
4	Income generated due to primary livestock	4462	3943	13% increase

Participants of the farmers' group said that they got to learn about evidence-based practices for livestock management. As per the NGO representative, livestock management had impacted 176 famers with animals through the organization of 6 cluster-based camps. This household survey revealed that actual benefits were accrued by 330 livestock farmers, which was 87% more beneficiaries as reported from secondary information.

SDLE – Strengthening Self-Help Groups (SHGs)



Most information about the workings of SHGs, activities implemented under HRDP for their enhanced functioning and visibility, and the impact of HRDP was collected through focus group discussions with the members of SHGs. This information was also correlated with the qualitative assessment of PRI members, Government officials, and NGO representatives.

When respondents were enquired about their association or any other family member's association with the SHGs during the household survey, it was found that 50% of them were members of any SHG, and 35% of their family members were a member of any SHG (Annex 1).

As per the NGO representative, the significant SDLE activities carried with SHGs were 3-months training of women and adolescent girls in stitching center, the establishment of mustard oil mill by SHG women, mushroom cultivation training for SHG women, and paper plate making.

Analysis of discussion with SHG members is summarized below:

• Background of SHGs

The SHGs have been active for the last four and half years and comprise all women members. The SHG is primarily engaged in mushroom cultivation and have received pieces of training in stitching and apron making. As per respondents, the goals and objectives of their group are saving money, investing it to support other members in self-employment opportunities, and exchanging resources that can be used for business purposes.

Awareness of SHG about HRDP

Most members of SHGs were aware of the works done under HRDP in 10 villages by the NGO.

'There has been a lot of work done, like Mushroom cultivation, production of organic manure for farming, painting of schools, solar irrigation plant set-up, provision of smart classes for children etc.'

One of the respondents of SHG

• Relevance of training programs

All the respondents agreed that training under the HRDP (for SHG) was required for their group and to help them with their needs. This training has supported them in accomplishing their goal of self-reliance and livelihood generation.

Impact of training programs

As per the respondents, before HRDP, there was no active SHG. Activities under the SDLE initiative have strengthened these SHGs as now they learned the process of bookkeeping, access loans from banks, exchange money among themselves, and make savings for themselves. Now, members are more confident about training other women if required in the future.

'Earlier also we used to save, but it was not efficient enough. However, now that we have learned bookkeeping and other methods, we feel more empowered in financial management.'

One of the respondents of SHG

'It has helped us in getting employment. We are happy to be indulged in mushroom cultivation. We used to sit idle earlier in search of work, which is not the case now.'

One of the respondents of SHG

It was found that the stitching center created self-employment and business opportunities for 70 out of 124 women and adolescent girls. A total of 36 women are engaged in Micro-enterprises activities. All 10 SHG with 131 women were connected with bank, and 5 social enterprises are currently functional.

• Convergence with Government schemes

According to respondents, they did not get any support from the Government institute and only received training and funding from HRDP initiatives like mushroom cultivation and other associated activities. Post interventions, every member of SHG opened their bank. Thus, it could be inferred that HRDP intervention has linked SHG members with banking services.

Efficiency of NGO

As per SHG members, they used to meet with NGO staff once or twice every month. The NGO could be easily reached out via phone whenever SHG members require any help or assistance.

'Sanjeev sir often comes and conducts meetings. They used to tell us to gather people whenever they were supposed to come for taking sessions.'

One of the respondents of SHG



C. Theme III – Health and sanitation

Awareness of households and their coverage

When enquired about health and sanitation-related activities under HRDP, 93% of respondents were aware of, and 87% were covered under these activities (Annex 1). Further, when asked about the type of health

services availed, it was found that they had availed services related to general health camps (100%), distribution of medicines (32%), referral to health facilities (34%), and counseling services (37%) (Table 8). Apart from health camps, other health & sanitation-related activities implemented were – Support during VHNDs works related to AWC, promotion of Menstrual Health & Hygiene among adolescent girls, provision of drinking water facility through construction of Jal minars, and financial assistance for construction of toilets.

Table 8. Type of services availed by the household during these medical camps

S. No.	Type of services availed by the household during these medical camps	Count (N)	%
1	General health check-ups	621	100%
2	Distribution of medicines	197	32%
3	Referral to the health facilities	213	34%
4	Counselling services	232	37%
5	Others	0	0%

This information was supplemented with the qualitative assessment of interviews with ANM, AWW, and FGDs of adolescent girls. According to ANM, the main activities that were implemented include organizing health camps in their villages, supporting VHND sessions, and sensitization of adolescent girls on Menstrual Health and Hygiene.

'Activities were taking place in my locality and more than the activities into action. I am glad about the acceptance that people within the community have shown towards all these activities.'

- ANM, Bihar Cluster village

As per AWW, orientation sessions were done during VHND. AWW's were made aware of the wellbeing of pregnant women and lactating mothers, their nutrition, and vaccination. Beautification of AWC was also carried, including renovation of centre and painting of walls to make it beneficiaries' friendly. Awareness sessions were organized to make adolescent girls aware of menstrual hygiene and health (MHH). Awareness generation was done through the rally, Nukkad Natak, Mukhauta Natak, Swachchta Abhiyaan, Diwar Lekhan, and showcasing of videos.

Apart from these, there was a provision of clean drinking water for the households through the construction of water tanks (Jal Minars) and the construction of toilet facilities through financial assistance to individual households (already covered in the SES section).

Relevance

Most respondents agreed that these activities were extremely essential (30%) and very essential (41%) for their household (Annex 1).

According to ANM during interviews, these interventions under HRDP were very much required for their area. HRDP activities sincerely targeted the real-time challenges faced by the community. Support of NGO staff during VHND sessions has strengthened the services regarding Maternal and child health and Adolescent health. Health camps have benefitted not only the resident villages but also people from other villages.

As per the respondent (beneficiaries) during interviews, the program is very effective and relevant to the community's needs in its way. It covers almost all the possible areas for improving health care.

Moreover, the attempt of initiating talks about unconventional health issues such as MHH is somewhere indicating attempts to reduce the load on curative care.

When enquired from AWW (during interviews), she said that these activities were in line with the needs of the AWC and beneficiaries, including infants, young children, pregnant women, lactating mothers, and adolescent girls. These met the training needs of service providers also such as AWW and AWW helpers. Before HRDP, the condition of AWC was inferior, but after the beautification work, there has been a complete transformation in the landscape of the AWC that is more attractive to the beneficiaries for availing services.

'Earlier, Anganwadis were not well maintained and up to the mark condition but now their complete picture has been transformed.'

- AWW, Bihar Cluster

Impact

The majority of respondents (83%) have said that they were benefitted from the services of health camps (Figure 15). 97% of respondents said that their knowledge about health issues had improved. 50% had easy access to the health personnel, and 35% had easy availability of medicines. Additionally, 31% knew where to get basic investigations done, and now 30% knew where to go in case of emergency (Annex 1).

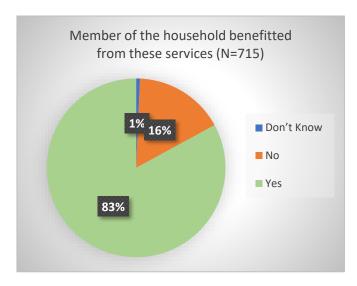


Figure 15. Members of the household benefitted from these services

When asked by ANM about the impact of these activities, she said that the number of registrations for Antenatal Care (ANC) had increased for the VHND sessions. Immunization among children during these VHND sessions had also increased due to awareness generation activities by the NGO.

'ANCs registration has increased from 8-9 to 17-18, and immunization rates have also increased gradually such that 22-25 infants out of 30 deliveries are immunized at one site only.'

ANM, Bihar Cluster

During interviews, it was revealed that due to MHH related activities, adolescent girls more aware of the mensuration and associated issues. Now, girls and women started discussing the challenges more comfortably and confidently with their peers and health workers. This also resulted in early identification of issues that can be resolved earlier with minimal intervention. Now, women were

more cautious about maintaining their hygiene. Not just residents of the nearby villages but FLWs such as ASHAs were also benefitted from these camps.

'ASHA workers are now more vigilant about the conditions and their duties, which is itself very important in improving the health of the community. Apart from this, the impact is really visible on adolescent girls and women of specific localities as they are more sincerely responding to the new practices regarding their health.'

ANM, Bihar cluster

D. Theme IV - Education

Awareness of households and their coverage

Most households were aware of activities being implemented in the schools under HRDP. These include - beautification of schools (96%), and increased amenities within schools (88%) (Figure 16). When asked by the school principal and teacher in an interview and parents and school-going children during FGD, they said they were fully aware of these activities being implemented by the NGO (IDF) under HRDP.



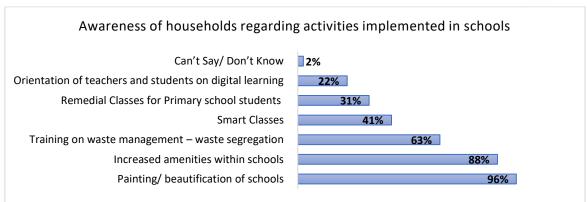


Figure 16. Awareness of households regarding activities implemented in schools

As per interviews with beneficiaries, the key child-friendly activities implemented were beautifying the school premises through painting walls, repairing broken floors, installing wash-basins, and tap for drinking water. Additionally, the construction of toilets, new seating arrangements through desks and benches in the classrooms, sports material, musical instruments, and books for the library were the other key activities.

As per the stakeholders, Smart/ Digital classes also played an important role in improving education. Some of the key support provided was the different equipment types related to smart classes and revised learning materials, including animation videos. A one-day orientation of teachers on how to start and operate Smart classes was also given. The NGO staff was regularly in touch with the teachers whenever they faced any difficulties in operating the Smart classes.

Based on interviews, the interventions related to remedial classes were — recruitment of special teachers to take classes of weak students, a listing of weaker students and encouraging them to attend these classes, and regular conduction of these classes. Even Bal Sansad was made active under HRDP by conducting a two-day orientation of Bal Sansad members regarding their roles and responsibilities.

Relevance

When enquired whether these activities were required for schools, 48% of respondents agreed that these activities were essential for the schools and children (Annex 1).

During interviews, it was found that a lack of infrastructure and study materials hampered education within the villages earlier. Thus, post-HRDP activities carried for a child-friendly environment were essential and have resulted in such a transformation that school premises are more attractive to the students and children are showing more interest in education. The children's needs, like audio-visual aids (in smart classes), and remedial classes, were essential, and HRDP activities have made learning more engaging and interesting.

Impact

Nearly 49% of respondents agreed that they were very much benefitted from these activities (Annex 1). The type of benefits includes – child regularly attends classes (90%), the interest of the child in studies had increased (81%) and there was an improvement in grades of children (46%) (Figure 17).

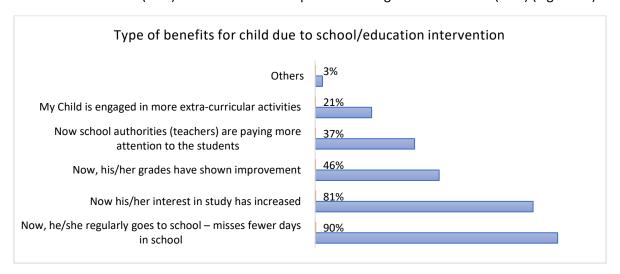


Figure 17. Type of benefits for the child due to school/education-related interventions

During the survey of households, parents of the children going to school informed that there had been an increase in the number of days that the children are going to school, and additionally, there has been an overall improvement in the academic performance of the children (Table 9).

Type of Change	Before HRDP	After HRDP	Change observed
The average number of days in school/ classes	17	20	On average 3 days increase in attendance
Change in the overall performance of children in % (for schools evaluating in this format)	61%	70%	On average 9% increase in performance
Change in the overall performance of children in grades (for schools evaluating in this format)	67% children in A+ to B-	71% children in A+ to B-	4% increase in the number of children grading better in school

Table 9. Impact in education due to HRDP intervention

As per the interviews with beneficiaries and stakeholders, activities for creating a child-friendly environment in the schools have made schools more attractive to the students who were earlier not interested in coming to schools. Additionally, smart Classes provided a better way of learning, specifically those subjects and concepts that are difficult to understand without adequate visualization techniques. It made learning more interesting and engaging, and now children are more eager to learn about new things and concepts. It also assisted teachers in making children understand complex concepts which they found earlier difficult to make children understood.

'Now, children often talk to each other that we should go to school today as the teacher will be showing us something very important on TV.'

- School Principal

'Aditya Kumar, a student, did not want to learn at all earlier, but with the AV aids, he became more curious about subjects and now asks questions in the class more than any other students.'

Teacher

As per the beneficiaries (during an interview) Children are more aware of their roles and responsibilities and assists teachers in the day-to-day activities of schools. Bal Sansad members also convinced those children who were either missing classes or drop-outs to attend the schools regularly.

'Only teacher can't oversee everything, and this Bal Sansad was very much required as teacher get lot of help from the members of bal Sansad, they can handle the class in the absence of the teacher if required, they convinced other children to attend school regularly and ensures cleanliness in the school premises.'

Teacher

According to stakeholders (Interviews), there is an increase in the enrollment of new students and the attendance rates of exiting students for e.g., on average, the attendance rates have shown improvements from 50% to 70%. Now, students are regularly attending the classes..

'School attendance rate has improved from 50% to 75%. School retention has increased; students want to learn more now.'

Teacher



E. Theme V – Digital/Financial literacy

Awareness of/involvement in intervention

83% of respondents were aware of digital/ financial literacy activities, and 40% of them had attended/trained under these activities (Annexure 1). These include – knowledge of banking services, Govt. schemes, and Mobile-based learning (Figure 18).

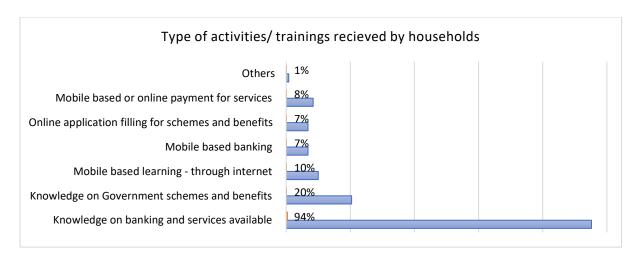


Figure 18. Type of training received by households

Relevance and Impact

94% of respondents said these activities were essential for their households and the villages (Annex 1), and 50% of respondents agreed they had received significant benefits from them (Annex 1). The type of benefits included – awareness about basic banking services (83%), how to access these services (28%), and various Government schemes (18%) (Figure 19).

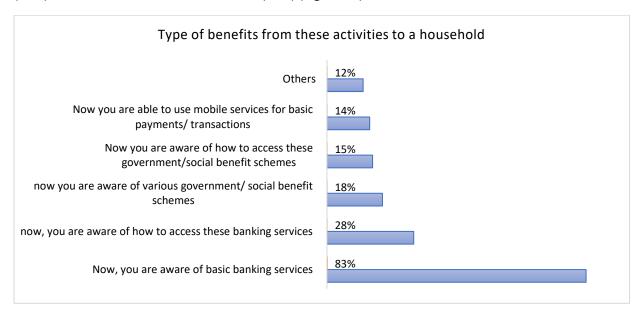


Figure 19. Type of benefits from these services

HRDP Impact in Maharashtra

Household Details

The basic profile of respondents

A total of 672 households were surveyed within district Pune, Maharashtra. Out of the total 672 respondents, 66% were males with an average age of 46 years, and the remaining 34% were females of an average age of 42 years (Table 9). Nearly 93% of the respondents were married at the time of the survey (Annex 2). Based on religious groups, the majority of the households were Hindu (97%), and within social groups (caste), the majority belong to either general (56%) or OBC (40%) (Figure 20). Out of the total respondents, 69% of respondents



were the primary earners within the household, and for those respondents who were not primary earners, 22% were the spouse of the primary earner (Figure 21).

Table 9. Distribution of respondents according to gender and age

S. No.	Gender	Gender dis	tribution	Age distribution		
5. NO.	Gender	Count (N)	%	Average	Max.	Min.
1	Female	229	34%	42	85	18
2	Male	442	66%	46	85	18
3	Don't Know	1	0.1%	57	57	57
Total		672	100%	45	85	18

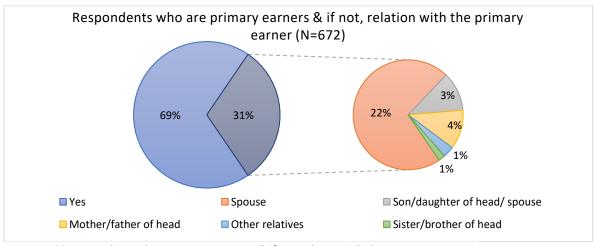
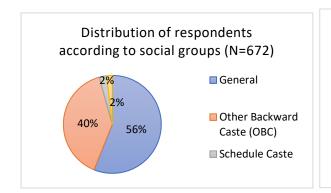


Figure 20. Respondents who are primary earners & if not, relation with the primary earner



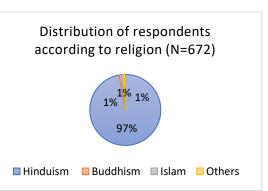


Figure 21. Distribution of respondents according to religion and caste

Family details

On average, every household had a minimum of 5 members, and two members were below 18 years of age within the family (Annex 2). 97% of the households were permanent residents in the village (Annex 2).

The majority of respondents were permanent residents of the village. Thus, most of them would have been exposed to the interventions under HRDP. Also, as most respondents were either the primary earners themselves or their spouses thus, from the point of assessment they were the ideal respondent for the household survey.

Socioeconomic details

Education status

While 86% of the primary earners had been to school, out of those, most (46%) attended classes between 5th to 10th (Figure 22). When enquired about other adult family members, 47% of the household had other members attending school (Annex 2).

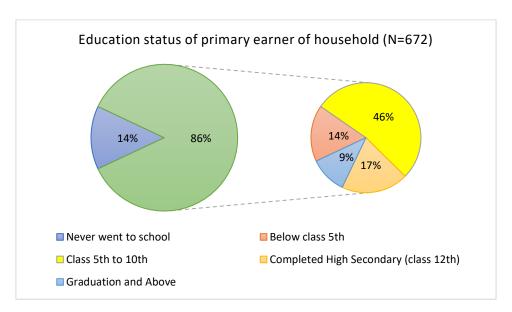


Figure 22. Education status of primary earner of the household

When looking at households that have children (450), the majority (79%) are sending them to school (Figure 24). Even within the household that doesn't have educated primary earners, most of them (85%) are sending children to school (Figure 24.1). Thus, there is an indication that, despite adult education status, education of children has been rightly promoted within the villages.

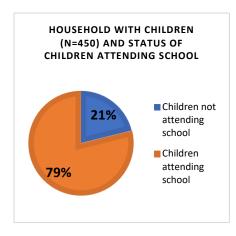


Figure 23. Households with children and status of children attending school

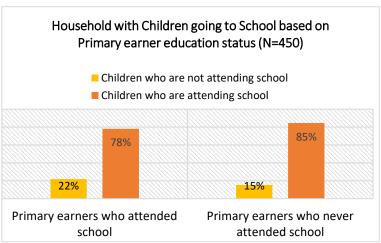


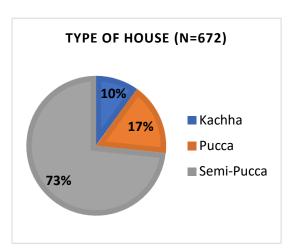
Fig 24.1. Household with children going to school and primary earner education status

These observations were supported by the assessment of discussions with parents and children attending school. All participants of the parents' group agreed that they would like their child to attend schools, get educated, and get a good job, preferably a government job. The children's group is currently enrolled in school but not attending for the last 2 years due to the COVID-19 pandemic. Despite the gap, they were aware of the school's education benefits and wanted to get a good job.

Economic status

Work Status

When enquired about the type of house, it was found that nearly 17% of households own a pucca house (Figure 25). The majority of the households (90%) were landowners (Figure 25), where 35% were small farmers, and 13% were marginal farmers (Annex 2). When questioned if their land holdings have changed, most landowners (nearly 100%) responded that no change happened in their holdings in the last 1-3 years.



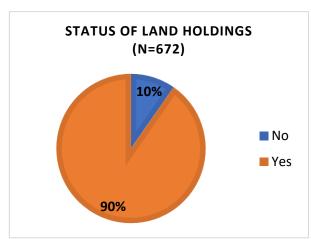


Figure 24. Type of house and status of land holdings

When questioned about the work status, the majority of the primary earners were farmers (80%), followed by salaried employment (7%), daily wage workers (6%), self-employed (4%), and seasonal workers (1%) (Figure 26).

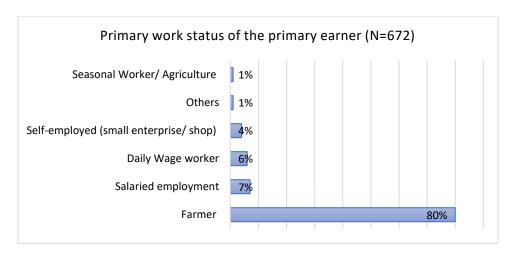


Figure 25. Primary work status of the primary earner

On inquiring about the status of livestock, nearly 50% of the household's owned livestock, and out of those who own livestock, around 52% of them are engaged in commercially selling livestock or goods produced from them (Annex 2). Moreover, nearly 22% of the household had other family members engaged in farming activities besides the primary earner. Thus, out of the total households (N=672), 89% were found to be engaged in some form of farming activities (Annex 2).

Household Income

When enquired about the status of family income, it was observed that out of 672 households, there had been a decrease in the number of households whose family income lies in the range of less than 1000 and between 1000 to 5000 for the current time period as compared to before HRDP (Table 10). However, for family income in the range between 5000 to 10000, and 20000 to 30000; there has been an increase in the number of households for the current time period as compared to before HRDP. This change in income group hints towards a positive shift of households from low-income status to higher-income status during the last 3 years. It can be remotely associated with the various interventions implemented under HRDP that focus on increasing livelihood or income.

Table 10. Status of households in terms of family income before HRDP and now

S. No.	Family income	Current number of households (N)	% Distribut	Number of households before HRDP Intervention (N)	% Distribu
	(Range)		1011		tion
1	1000 <	29	4%	39	6%
2	>= 1000 to 5000 <	161	24%	213	32%
3	>= 5000 to 10000 <	195	29%	168	25%
4	>= 10000 to 20000 <	125	19%	126	19%
5	>= 20000 to 30000 <	76	11%	41	6%
6	>= 30000 to 40000 <	31	5%	31	5%
7	>= 40000 to 50000 <	16	2%	13	2%
8	more than 50000	39	6%	41	6%
	Total	672	100%	672	100%

Additionally, households with farmers or landowners were enquired about the frequency of making earnings from the sale of agricultural produce in a year, as many HRDP initiatives were focused on

improving farming practices. On inquiry, there has been an increase in farmers making earnings 2-3 times in year from sale of agricultural produce now (96%) compared to before HRDP (92%) (Fig. 27). It was also observed that 2% of landowners who were not selling their produce before HRDP decreased to 0%, indicating people adopting farming as a source of income. Thus, the change in farming output is indicative of increased utilization of land and successful adoption of farming practices.

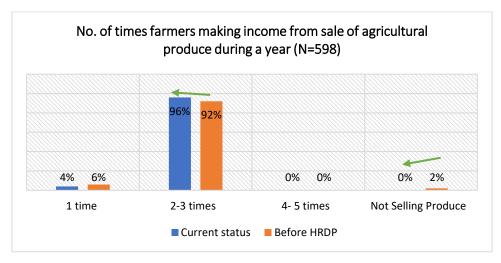


Figure 26. No. of times farmers making income from the sale of agricultural products during a year

As farmers were one of the prime beneficiaries under the HRDP, generating alternate income sources was one of the key interventions. Thus, we continued to investigate whether there were any such cases within the intervention villages. Upon inquiring, 26% of the farmers were engaged or had other sources of income (Fig. 28), like livestock (16%), self-employed (5%), small business (1%), and social benefits/government schemes (1%).

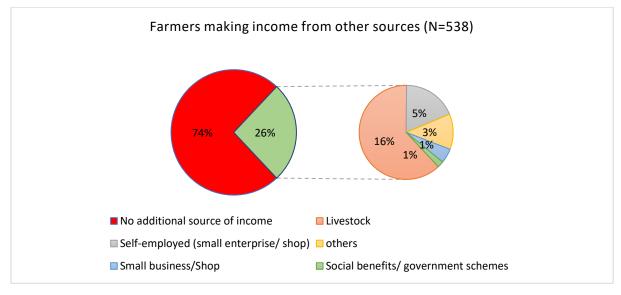
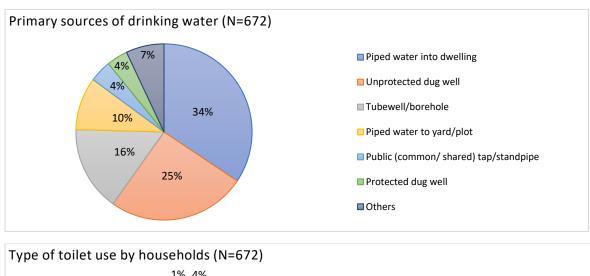


Figure 27. Farmers making income from other sources

Upon examining whether any other members contributing to household income, it was found that nearly 16% of the households reported that additional members were contributing to the overall household income (Annex 2), and on average, contributed about 19,192 INR (Annex 2). Currently,

most of the additional family members (57%) are engaged in salaried employment (Annex 2). Moreover, 22% of these additional members (who are contributing to household income) reported an increase in income in the last 1-3 years (HRDP intervention period) (Annex 2).

Regarding information related to sources of drinking water and type of toilet use, it was found that 34% of households had piped water into their dwelling (Figure 29). Regarding the type of toilet facility used by households, most households used pit latrine with slab (62%).



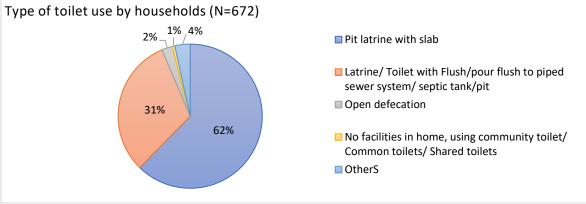


Figure 28. Primary source of drinking water and type of toilet facility used by households

Thus, most households had safe drinking water and safe sanitation practices within the households.

Thematic domain wise Intervention and Impact

Under the HRDP, the interventions were designed and implemented for addressing needs assessed under specific thematic domains. To understand the domain-wise overall activities done and the fundamental changes observed the assessment was done first to understand the "awareness" of people within the village regarding the intervention. Out of those aware, next, we assessed the common interventions in which households were covered. Post-initial questioning, out of the total households that were aware, we asked for their opinion on the "relevance" and the overall "benefit" of the intervention. Lastly, the specific details of the benefits or impact were collected from the households that reported any benefit (whether significant or less).

A. Theme I – Natural Resource Management (NRM)

In Maharashtra, the key activities implemented under NRM include – activities for adequate water storage or increase in water reservoir or soil conservation

near river/ water source. Activities for ensuring an adequate supply of drinking water. Lastly, activities for promoting the use of existing natural resources or clean energy sources.

Relevance of NRM related activities

When asked about the relevance of NRM activities, the majority of households agreed that these activities were very essential for their household (61%) and village (57%) (Annex 2).

While interviewing, the PRI members added that these activities were very much required for their villages. Specifically, activities like check dams, well-deepening, etc., were essential for the village.

NRM - Interventions for adequate water storage or increase in water reservoir or soil conservation near the river

Awareness of households and their coverage under activities

About 48% of the households were aware of the activities, and nearly 44% were also covered under these activities (Annex 2). Among the activities, construction of loose boulder structures (55%) and farm bunding or cement nala bund (50%) were done predominantly to conserve the good river and farm soil (Fig. 30).

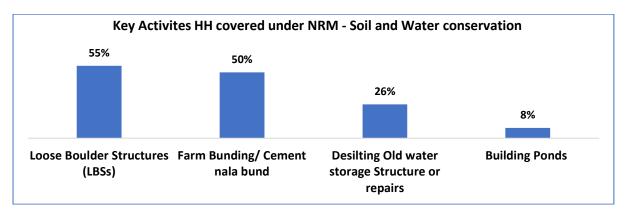


Figure 29. Type of activities households are covered under NRM – Soil and Water conservation

These activities ensured the long-term conservation of river soil and farm silt and soil. PRI members and Farmers groups supported these findings during the interviews who confirmed that soil conservation, desilting and repairs of dams, and water conservation of rivers and for the farm were some of the key activities done under HRDP.

Impact

Upon inquiry, it was found that most respondents felt that these activities provided significant (46%) benefits or were somewhat (41%) benefitted (Annex 2). In terms of the type of benefits, most respondents felt that increase in soil fertility (62%), more water for farms (35%), increased water in reservoirs (26%), and an overall increase of land under irrigation (19%) were the significant benefits due to these activities (Fig. 31).

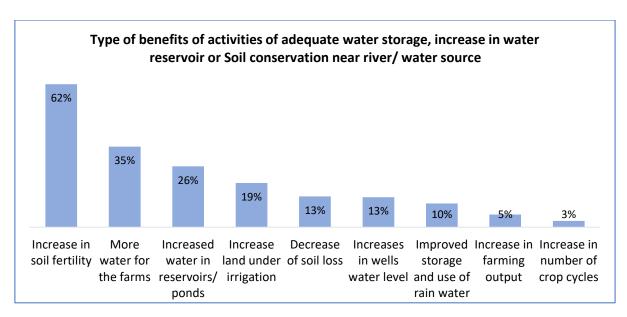


Figure 31. Type of benefits of activities of adequate water storage, increase in water reservoir or Soil conservation near river/ water source

Additionally, farmers that benefitted from the increased farming output (Fig. 30) reported a 24% increase in main produce from their farms when comparing current output versus output before HRDP activities (Annex 2).

These findings were substantiated with qualitative assessment. As per respondents, activities are still being implemented in certain pockets and have positively impacted the lives of farmers. Respondents of the farmers' group said that rainwater is currently not wasted due to the construction of dams, and this water was utilized for agricultural and drinking water purposes. There is an increase in area under irrigation and also increased availability of water for more months. All these changes were observed post the HRDP interventions.

During interviews, the PRI members added that improving water availability was essential, and desilting/repairing dams was vital for the villages. As per the PRI members, the NRM-related activities increased the overall land under cultivation due to improved water availability.

Well, dams were a necessity of the village for water supply. The water level has risen. The canal is very far. The dam has definitely benefited.

- PRI member, Maharashtra cluster

The area under cultivation increased by 8 % to 9%. 15 to 20 acres of new land is there. It grew by about 10%.

PRI member, Maharashtra cluster

NRM – Intervention for ensuring adequate availability of drinking water

Awareness and coverage of households on interventions related to providing availability of drinking water

Out of the total, 25% of the households were aware of the activities associated with increasing drinking water availability (Annex 2). Among those aware, 20% of the households were covered under various activities. Water supply well



deepening (52%) and deepening of wells (42%) were the two major activities that respondents were aware of (Annexure 2) and also were covered under (Fig. 32).

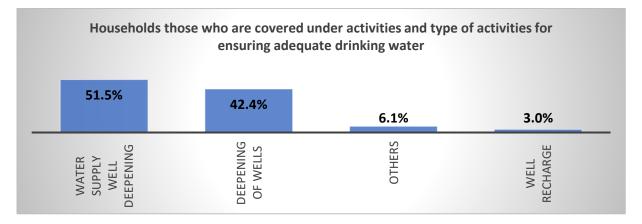


Figure 32. Major activities covering households under NRM-Drinking water availability activities

Impact of activities

Among those aware, most of the respondents replied that they were either significantly (42%) or somewhat (46%) benefitted from the activities (Annexure 2). Among the benefits, most respondents reported a significant increase in water levels within the wells (32%) and an increase in drinking water availability within the household (13.7%).

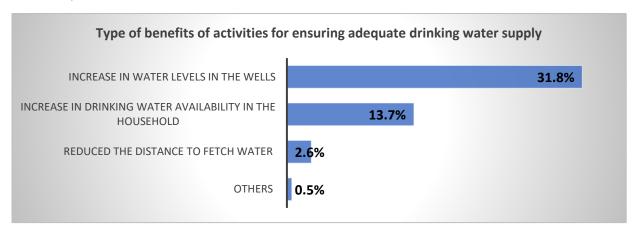


Figure 33. Impact of activities related to Increasing drinking water availability

Additionally, when asked for details, the households reported that compared to the status before the HRDP intervention, there is currently a 21% increase in the number of households with 24x7 drinking water available (Annex 2). Moreover, households that had water less than 3 days a week decreased from 6% to 2% after HRDP interventions (Annex 2). Thus, more households have a stable drinking water supply due to HRDP activities in the last 3 years.

These findings were supported by the PRI members who affirmed that SDLE activities increase water availability within the villages.

Access to drinking water increased by 40%. There are 150 houses in our village, we now have enough water for all the houses, earlier it was very less.

-PRI member

During the interview with the NGO representative, the needs or relevance of the interventions was further highlighted. As per the NGO, earlier, residents of some villages experienced water shortage for nearly 6-7 months. With various activities such as dam construction and rainwater harvesting, the water is available for more months, and water shortage is limited to only 2 to 4 months. The water level has increased and availability and quality of water has improved and can be used for anything now

NRM - Interventions for promoting the use of existing natural resources or clean energy

Awareness and coverage of households under natural resource and clean energy

45% of the households were aware of the activities done under natural resources and clean energy utilization (Annex 2). Among those that were aware, 46% of the households were covered under the specific activities. Most households were covered under smokeless stoves (60%) (Fig. 34).

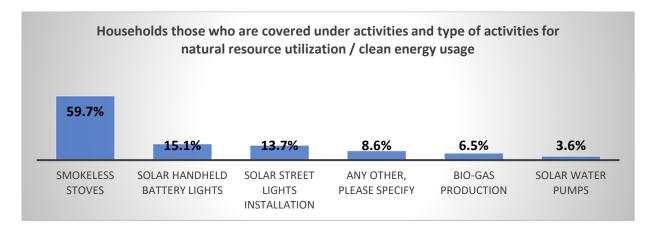


Figure 34. Major Activities covering households

Even the PRI members, who during interviewed, were aware that the key activities done were related to solar powers and installation of solar-powered motors. The PRI members also informed that awareness campaigns were done to improve knowledge on clean fuel usage and the celebrations of agriculture day.

Impact – solar streetlights installations and solar handheld battery lights

Out of those aware of the intervention, most agreed that the interventions significantly (35%) or somewhat (52%) benefitted their household and their village (Annex 2). When looking at the specific benefits, most households reported that the use of solar lights improved the overall security within the village at night (61%) and that electricity was available throughout the night (60%) (Fig. 35). Additionally, 51% reported that traveling at night had significantly improved due to solar lights, and some (15%) even reported a decrease in the number of accidents at night (Fig. 35).

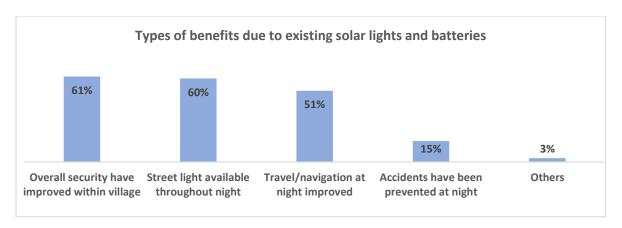


Figure 35. Impact due to solar lights and batteries

During interviews with the PRI members, they stressed the importance of clean fuel and informed that the NGO partner promoted awareness on clean fuel and the use of smokeless stoves to women in the village. As per the members, initiatives like smokeless stoves greatly benefitted the women and the household.

Women told them that they had to cook on Chulhas. NGO suggested an option of Bio Gas. This was very helpful for women because this solved the issue of excess smoke and the quantity of fuel.

- Gram Panchayat member

Impact – Solar water pumps

Most respondents agreed that solar water pumps provided significant (61%) or somewhat (17%) benefits to their household and the village (Annex 2). When asked about the specific most responded that solar pumps made irrigation more convenient than traditional methods (71%) (Fig. 36). Additionally, the land covered under irrigation significantly increased due to automation (41%), and the overall manpower requirement also reduced (12%) (Fig. 36). Some respondents (12%) also noted that the overall cost of irrigation was reduced due to solar pumps (Fig. 36).

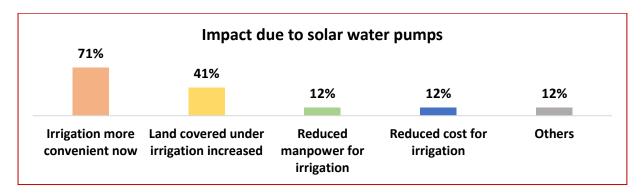


Figure 36. Impact due to solar pump irrigations

On analyzing the current cost of irrigation, a 4% drop in cost was observed when comparing the cost before and after solar pumps introduction (Annex 2).

The benefits observed for solar lights and solar pumps were further supported by farmer's group. During interviews, the group specified that solar lights have been very helpful and convenient, especially during long power cuts. Additionally, solar pumps coupled with other NRM activities to

increase water have increased the overall area under irrigation and increased water availability for more months than previously observed.

Impact – Smokeless stoves and biogas production

Based on their perception, most respondents agreed that smokeless stoves and biogas provided significant (36%) or somewhat (43%) benefits to their households and the village (Annex 2). When asked about the specific benefits, most reported that there had been a significant reduction in indoor smoke (77%) during cooking (Fig. 37). Additionally, 40% said that cooking and related activities became more convenient due to clean fuel usage, reducing the fuel cost (30%) (Fig. 37).

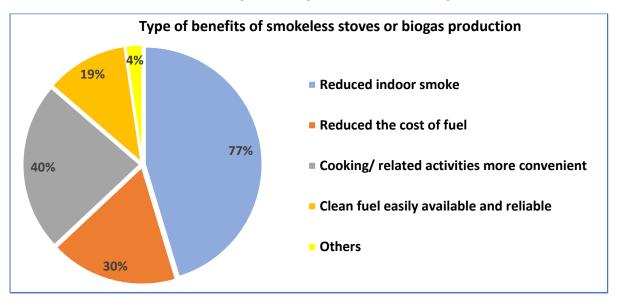


Figure 37. Impact due to smokeless stoves or biogas

When asked about the actual reduction in fuel cost, the respondent reported that compared to past costs (before HRDP), a 31% reduction was observed (Annex 2).

The farmer's group further supported the findings during interviews. As per the group, the use of smokeless stoves and biogas resulted in savings on LPG and other fuels. Additionally, the interviewees added that due to smokeless stoves, their house is smoke-free now.

B. Theme-II Skill development & livelihood enhancement (SDLE)

Within the SDLE domain, skills and livelihoods related to agriculture or farming (and related activities), livestock health, nutrition, and overall management were promoted. Within the SDLE, the SHG groups within the villages were also strengthened as they formed one of the key fulcra for livelihood generation within a village setup, especially for women.



Relevance of SDLE related activities and intervention

Out of the households aware of the various activities or interventions under the SLDE, the majority felt that the activities were very essential for their household (55%) and the village (58%).

As per the NGO representative, the key activities for land productivity include imparting knowledge and requisite skills to farmers regarding soil nutrient management through farm-based school, soil

testing studies (assisted by the NGO), agriculture department, and crop diversification with the promotion of vegetable crops. Thus, based on this ideology, the activities under the SDLE were considered to be essential for the Maharashtra cluster.

SDLE – Agriculture or farming and associated activities

Awareness and coverage of households under SDLE related to agriculture or farming and associated activities



On inquiry, out of the total, only 18% of the households were aware of activities or interventions related to farming and associated activities (Annex 2). Most were aware of activities or training about bio-fertilizers and the treatment of seeds (12%). Among the households aware of the intervention or the activities, 48% were covered under them (Annex 2). Most respondents or their family members were involved in various training and support activities (Annex 2). Respondents and their families were most commonly exposed to horticulture training with drip irrigation and crop diversification (Annex 2). The assessment also understood the respondent's most common training or activities and family members adopted after exposure (Fig. 38). Among the training, micro-irrigation or drip irrigation (29%), use of treated seeds (27%), and use of bio-fertilizers (22%) were the commonly adopted methods by the households (Fig. 38).

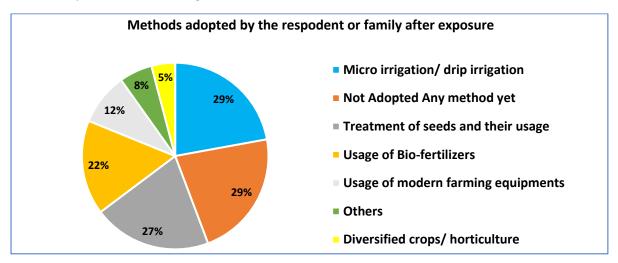


Figure 38. SDLE related training adopted by the respondent and his/her family

Given that the most predominant primary earners are farmers with additional family members associated with farming and related practices, awareness of SDLE activities related to farming was low. Thus, given that Maharashtra clusters have predominant farmers, it is recommended to promote these activities further, leading to more members adopting new or better farming practices.

Impact of activities related to SDLE - Agriculture or farming and related activities

Out of those aware of the activities, most respondents reported that their village and household were significantly (48%) or somewhat (40%) benefitted from the SDLE activities (Annex 2). On inquiring about the specific changes or impact, respondents said that improved efficiency in using water for irrigation (40%) and immediate increase in farm productivity (37%) were the significant benefits (Fig. 39). Additionally, improvement in product quality (21%), reduction in fertilizer cost (20%), reduction in irrigation costs (19%), and an overall reduction in farming costs were some of the other major benefits as per the respondents (Fig. 39).

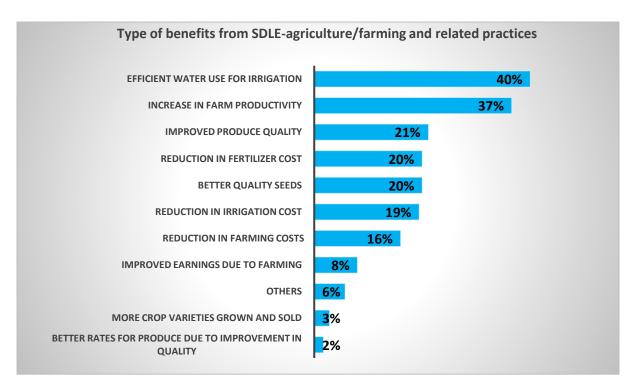


Figure 39. Impact of activities related to SDLE

When asked for the estimated changes observed by the respondent, we found a 12% reduction in the cost of irrigation per acre land for farmers when comparing the before HRDP intervention and after (Table 11). We also observed a 20% reduction in the cost of fertilizers for the farmer, while a 29% increase in primary produce productivity (of primary produce), and a 14% increase in rates for primary produce due to improved quality (Table 11). Overall, an average increase of 69% earnings from farming within a year, and for some farmers (n=5) that grew alternate crops, there was a 226% increase in earning (Table 11). Thus, overall, SDLE intervention vastly enhanced the farming output and earnings.

Table 11. Changes observed due to SDLE activities related to agriculture and associated activities

S. No.	Impact	Current status (Average estimates)	Before HRDP (Average estimates)	Change observed
1	Cost of irrigation per acre land (INR)	12788	14325	12% reduction
2	Productivity of primary produce per acre land in a year (Kg)	4368	3392	29% increase
3	Cost of fertilizing per acre land due to interventions in a year (INR)	4310	5158	20% reduction
4	Rate per Kg of the primary produce (INR)	22	19	14% increase
5	Earning from farming in a year (INR)	118143	69714	69% increase
6	Extra earning from alternative/ diversified crops/ produce (for limited farmers, n=5) (INR)	22000	6750	226% increase

DURING THE INTERVIEWS, the PRI members stressed that NGO partners promoted farmers to learn and adopt alternate farmings (like vegetable cultivation) and shift towards organic farming. As per the members, the NGO set up a mechanism to collect vegetables from farmers and increase the products' sales.

Krishi Vikas Sanstha had set up a company in a total of 7 villages. They had trained women. Vegetables were collected from the farmers and distributed among the people.

- Gram Panchayat member

Currently, Nearly 30% of farmers practice good practices. About 100 plantations and orchards are in progress. 4 to 5 orchards are being planted

- Gram Panchayat member

Based on interviews with the farmer's group, the main activities under HRDP were the distribution of sprinkler systems among farmers, the orientation of farmers regarding soil nutrient management, and the promotion of crop diversification. As per the groups, due to crop diversification, not only did the farmers have an extra source of income, but also the produce could be used for their own consumption.

'Now, farmers grow brinjals, tomatoes, or vegetables for their own use.'

One of the participants of the farmers' group

As per the NGO interviewee, the specific activities under the SDLE have resulted in increased awareness among farmers about nutrient soil management and the adoption of good agriculture practices. Consequently, risks associated with a single cropping system are minimized; land quality has improved; productivity has increased, which further enhanced the farmers' earnings.

SDLE – Livestock health, nutrition, overall management

Awareness and coverage of households under SDLE related to improving livestock health, nutrition, and overall management

Out of the total, 26% of the respondents were aware of activities and interventions related to livestock within the Maharashtra cluster (Annex 2). Among the intervention, respondents were primarily aware of animal health camps (16%) and livestock deworming activities (Annex 2). Among the aware households, 52% were covered under the various SDLE activities related to livestock, and similar to awareness, most either attended the animal health camps (43%) or had their livestock dewormed (36%).

Impact of activities related to SDLE – to improving livestock health, nutrition, and overall management

When asked if the respondents were aware of these specific SDLE activities, most responded that the interventions were either significantly (50%) or somewhat (35%) beneficial for their village and households (Annex 2). When asked about the specific benefits, the majority of respondents informed that there was an improvement in the overall health of the livestock (69%) and increased knowledge regarding proper livestock management (25%) (Fig. 40). Moreover, respondents added, the cost of maintaining livestock has reduced (25%), while the overall income generated increased (10%) (Fig. 40). Some respondents even said an increase in general livestock produce (13%) (Fig. 40).

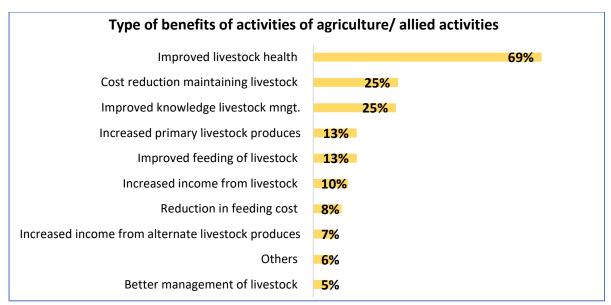


Figure 40. Impact of activities related to SDLE for improving livestock

Based on the information provided by the respondent comparing before HRDP and after changes due to SDLE activities, we found a 65% increase in the income from livestock due to SDLE activities while a 31% decrease in the cost for feeding primary livestock per month (Fig. 41).

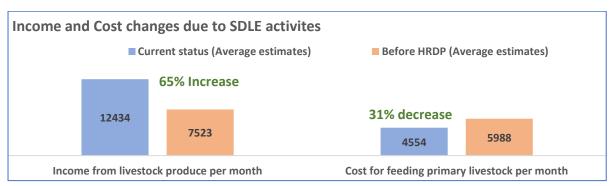


Figure 41. Income and cost changes due to activities related to SDLE for improving livestock

The findings were further supported during interviews with the farmer groups. As per the group, their cattle have been benefitted due to health check-up camps. The economic situation has improved, they can make some savings also. Additionally, the NGO group also provided support to buy alternate livestock, which the farmers then successfully utilized as an alternate source of income and sustenance.

'I was given hens. When I took the hens, I made eighty hens out of those sixty hens. The eggs were produced. At home, my mother had to do this job, but it was good for the family's survival.'

One of the participants of the farmers' group

SDLE – Strengthening of SHG groups

As the SDLE domain also worked on strengthening the SHG groups within the Maharashtra cluster, the assessment team interviewed (FGD) key SHG members to under the overall work that has been done and the impact made through the HRDP initiative.



Background of SHG

The SHG within the Maharashtra cluster was formed at 9 years of age. They usually conduct monthly meetings in which they discuss their problems and find solutions that are agreeable to the community and feasible to implement. They also lend money to each other whenever the members need money for their business. Through this SHG, they also organize religious and cultural programs for women.

Awareness of SHG about HRDP

The participants were very well aware of the activities being implemented under HRDP in their area. These include farming activities, the establishment of farmers' companies and enterprises; distribution of smokeless stoves and solar lamps; distribution of HYV seeds; promotion of vegetable cultivation; and establishing marketing linkages.

'They helped needy farmers; they gave sprinklers. Moong Seeds were provided to farmers, and the yield was purchased by the farmers' company. We had also done farming of Lady Finger (Bhindi).'

- One of the participants among SHG

Training programs under HRDP attended by SHG members

The NGO also strengthened the SHG through various training programs, including SHG management and governance training.

'If they wanted to select a director for a farmer's company from our self-help group, then I took training from my group as president. They thought our group was good, the record was good, the work was good, so they deployed me as a director.'

- One of the participants among SHG

Efficiency of NGO

As per the SHG members, before the pandemic, the NGO staff used to visit them regularly. During the visits, they share their activity updates and future plans with the NGO members.

'They just want to tell me the information and tell me to keep your group informed even if it is not possible for everyone to come.'

One of the participants among SHG

Impact on SHG

Based on the information during the interview, there was only a clear indication that HRDP did activate the various SHG groups and that the NGO group provided them training, and also some were provided with equipment like masala makers and grinding machines for generating income. According to one of the interviewees, the main impact was the overall income generated by the SHG group, which was then further used to promote development within the village. Even during the household survey, while 24% of the respondents were SHG members, 61% had additional family members who were part of the SHG members (Annex 2). Thus, indicating that a large number of people are currently part of the SHG and are active within the village.

As per the interviews with NGO representatives, the key beneficiaries among SHG were women farmers and women belonging to the scheduled caste community engaged in rearing goats and sheep.

As per the NGO, the key activities conducted were creating SHGs, Digital Literacy Training Program, capacity building for enterprise establishment, and assisting them in availing loans through the bank, particularly the HDFC ban. As a result, women SHG are more active now in organization building, savings, and financial transactions. They have established their enterprises also. There is a positive change in the quality of life of the project beneficiaries due to the enhanced earnings of women SHG members.

'After the end of the program, 48 women were given help to start their own enterprise activities.'

-NGO representative



C. Theme-III Health and sanitation

Within the Maharashtra cluster, the main emphasis on health was promoting health camps and providing associated services within the villages. Sanitation was also promoted under the HRDP intervention within the village.

Awareness and coverage of activities under health

44% of the respondents out of the total were aware of the health camps organized to promote health (Annex 2). When asked about details, most respondents were aware of general health check-ups (99%), distribution of medication (44%), and referral services (14%) provided within the camps 9Annex 2). Among those aware, 73% of the household had availed of various services provided within the health camps (annex 2). Among the services, the majority of members of the household had utilized general health check-ups (97%) and taking medications from the camps (43%) (Annex 2).

Relevance of activities promoting health

As per the respondents who were aware of activities done for health, the majority felt that activities done for promoting health were very essential for both the village (57%) and the household (64%) (Fig. 42).

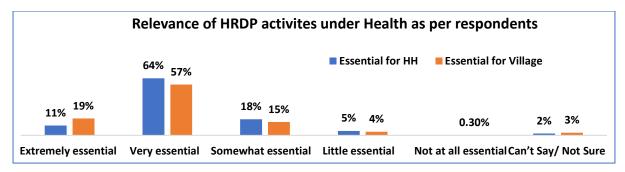


Figure 42. Relevance of HRDP activities under health

Impact of activities under health

The majority of the respondents agreed that they have benefitted from the camps (73%) (Annex 2). Also, 38% strongly agreed that the health camps also benefitted their family members a lot. When asked about the specific benefits, most respondents agreed that their knowledge has improved related to health issues (88%) (Fig. 43). Moreover, many respondents benefitted from easy access to health personnel (59%) and medications (60%) (Fig. 43).

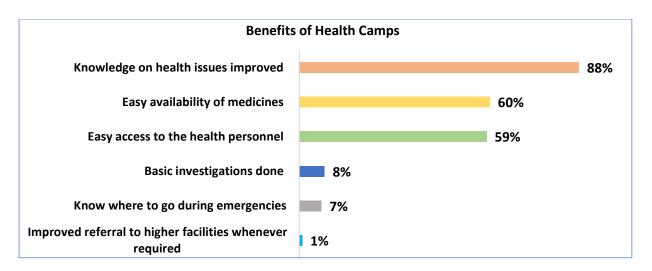


Figure 43. The benefit of Health Camps

D. Theme-IV Education

As part of strengthening the education within the Maharashtra cluster, various activities related to improving or providing school infrastructure, provision of key essentials for sports and library, digitalization of classes, and improve teaching methods with practical sessions or kits were some of the key activities done. For the purpose of assessment, household surveys to know the information on the school was done only with families that had a child going to school as it was expected that only such families would be able to provide necessary intervention details. During



interviews with the children's group, it was found that they are currently enrolled in school but not attending for the last 2 years due to the COVID-19 pandemic.

Awareness of activities done for school

On assessment, it was found that 66% of the families who had a child going to school were aware of the various intervention activities done under the HRDP for schools (annex 2). Most respondents were aware of paint jobs done in school (70%) and that the digital classroom had been established (Fig. 44).

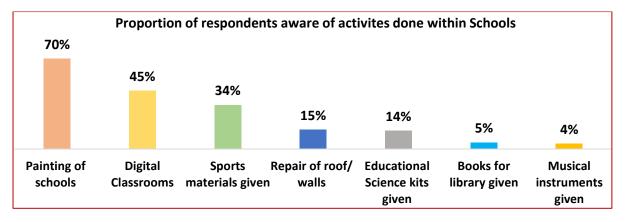


Figure 44. Awareness of respondents on school activities

Besides the survey during the interviews, the school headmaster also confirmed the various activities being implemented in their school under HRDP. As per the stakeholder, the key activities were

beautifying the schools by painting walls and planting trees. Additionally, the teachers added that Waste management and hygiene-related activities such as cleaning of campus, installing waste bins, awareness and demonstration about hand hygiene using soap and water, computer training to students, digital classes, and organizing competitions such as essay writing drawing, etc., were other major activities in school. As per the interviewee, even teacher's training was given to make learning more joyful.

'The training on imparting pleasant education to the students was given to us here by Hivare kumbhare Nayaka Pithapur. We have learned how to make different students happy, but we have also benefited from it. NGO brought us some experts who showed different activities, and it helped us a lot.'

School Teacher

When interviewing parents and children, both were aware of the activities being implemented in their schools under HRDP. These include – beautification of schools, Smart Classes, provision of sports and music equipment, and waste management and sanitation hygiene practices. However, they were not aware of the teachers' training.

When further asked about the specific activities - According to parents, trees are being planted, the building of toilets and washrooms, drinking water facility, painting of walls, teaching through digital means via computer, cleaning activities and promotion of hygiene and sanitation among children. According to children, the main activities were providing toys, music instruments, sports equipment, planting trees, organizing day trips, teaching via computers, celebrating festivals such as Holi, using bins for waste, etc.

'Planted trees, took drip taps, do not throw garbage here and there, pick up if there is garbage, we bathe every day, remove nails, wash our hands before eating.'

- One of the participants among the children's group

Thus, overall, the NGO partner implemented a wide variety of interventions that both parents and the children appreciated.

Relevance and impact of activities done for school

When asked if the interventions or activities for schools were important, most respondents agreed that all work done was extremely (25%) or very (60%) essential for the children and the schools. Moreover, most of the respondents also agreed that these activities provided significant (59%) benefits to the children or somewhat (36%) benefitted the child within the school.

The relevance of the HRDP interventions was further supported during interviews with children's parents. According to parents, beautification of schools was very much required as it makes the school environment more engaging for a child. Also, due to hygiene practices, children took care of themselves and made sure that their surroundings remained clean. Additionally, the parents felt that smart classes were essential for the children due to increased technological advancements within the country. They believed the smart classes would expose children to new technologies and make them more engaged in education.

On asking about the specific benefits, the majority of the respondent said that the child interest in studies had increased (76%) due to the improvements made in school, and now children tend to miss

a fewer number of days in school (or are willing to spend more time in school) (Fig. 45). 39% of the respondent also mentioned that the children overall grades improved (Fig. 45).

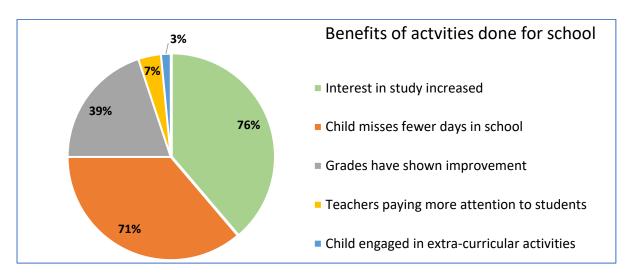


Figure 45. Benefits due to interventions done for school as per the respondents

When asked specifically about the performance in school, in schools providing grades, there was a 15% increase in the number of children getting A- to A+ grades when comparing before and after HRDP intervention (Fig. 46). Likewise, a 37% increase in the average percentage scores the child obtained at term-end (Fig. 46) in schools using percentages for grading. Besides performance, children currently attend more days in schools, on average 24 days per month compared to past (before HRDP) on average 18 days a month (annex 2).

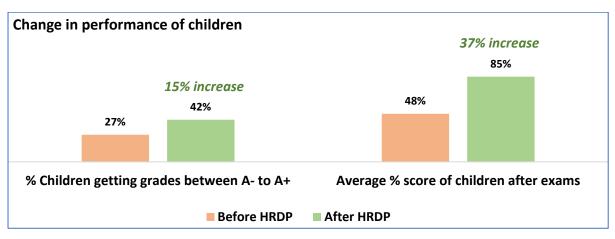


Figure 46. Changes in the performance of children before and after HRDP

The findings from the survey were supported during the interviews with PRI members, who believed that the activities implemented in schools would last for 10-15 years, thus, provided a sustained change.

Teachers and school faculties further corroborated the findings during interviews. As per the teachers, smart classes have benefitted both the children and teachers, making learning more engaging and exciting for students. Teachers are better able to make children understand complex concepts with Audio-visual aids. Waste management and hygiene practices have inculcated good habits among children, which will last long. Teachers' training and TLM have improved teachers' capacities. A child-

friendly environment has made schools more attractive to students, and they want to attend schools regularly.

The impact of the HRDP intervention in education was further supported by parents and children going to school. During interviews, both parents and children's groups agreed that these changes had brought positive changes in schools and quality of education. As per the groups, there is the availability of basic facilities such as toilets and drinking water. Before COVID-19 times, children were willing to attend the school regularly due to its beautiful environment.

'Due to beautification of schools and smart classes, English medium children are coming here; children living outside the village are also coming to school here.'

One of the participants among the parents' group

As per the parents, teachers are using online platforms such as WhatsApp and computers to teach children from home. Thus, making learning a more engaging and interesting activity.

'Teachers use other good methods which help students learn fast. Homework is given, students are found of doing it.'

One of the participants among the parents' group



E. Theme-V Digital/ Financial literacy

Within the Maharashtra cluster, work was also done to improve the population's financial literacy in relation to banks and banking services. Also, knowledge of digitalized or mobile-based banking and transactions and available government schemes were also some of the key activities done under this domain.

Awareness and coverage of activities related to financial or digital literacy

On inquiry, only 21% of the respondents were aware of various activities done for improving financial literacy within the villages. When asked about the specific activities, most were aware of the activities done to promote knowledge on banking and related services (13%) and mobile-based learning through the internet (11%) (Annex 2). Among those who were aware, 54% of the respondents attended any of the training provided under the thematic domain (Annexure 2). Most of the respondents attended training to improve knowledge on banking services (67%) and government schemes and benefits (51%) (Fig. 47). The respondents also attended training on the use of mobiles for learning (50%) (Fig. 47).

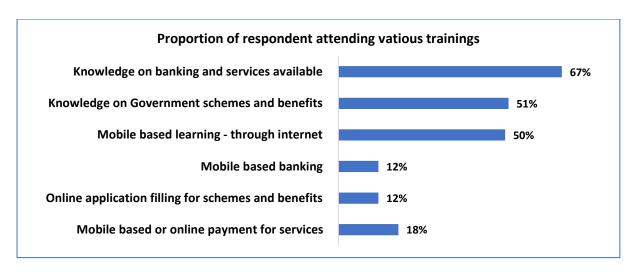


Figure 47. Respondents attending various training under financial and digital literacy promotion

Relevance and impact of activities under financial and digital literacy

When asked, most respondents agreed that the activities were extremely (29%) or very (56%) essential for their village. Respondent also agreed that these activities were equally essential ('extremely' 23%; 'very' 59%) for their households (family members). Moreover, 58% of the respondents agreed that the activities provided significant benefits (58%) to their home and the village. When asked about specific benefits, most respondents informed that their awareness (63%) and knowledge on access (53%) of banking services improved a lot (Fig. 47). Likewise, respondent's awareness (52%) and knowledge on access (15%) also improved due to the training provided under the HRDP interventions (Fig. 47).



Figure 47. Respondents attending various training under financial and digital literacy promotion

During interviews, the PRI members confirmed that due to the training provided, women in the village have become more independent when it comes to banking services, including banking transactions. Additionally, the PRI members highlighted that the 3 months of computer training for students has also been beneficial in improving digital literacy

Annexure 1 -Bihar Cluster

A.1.1 – Basic profile

S. No.	Marital Status	Count (N)	%
1	Divorced	1	0.1%
2	Married	711	93%
3	Never married	19	2%
4	Widowed	36	5%
	Total	767	100%

S. No.	Members in Household	Count (N)	Members in Household Count (N) who are below 18 years of age	
1	Average	5	Average	3
2	Maximum	20	Maximum	9
3	Minimum	1	Minimum	1

S. No.	Permanent resident or not	Count (N)	%
1	No	12	2%
2	Yes	755	98%
	Total		100%

S. No.	Duration of staying of respondents in the village who are not the residents of the village	Count (N)	%
1	1 month to 6 months	1	8%
2	1-3 years	6	50%
3	3-5 years	3	25%
4	6 months to 1year	1	8%
5	Less than 1 month	1	8%
	Total	12	100%

S. No.	Other than primary earner who has attended school		%
1	Don't Know	7	1%
2	No	597	78%
3	Yes	163	21%
	Total	767	100%

S. No.	Distribution of land holdings among households	Count (N)	%
1	0-1 acre	329	86%
2	1.1 - 3 acre	43	11%
3	3.1 - 5 acre	7	2%

	Total	382	100%	
5	>11.1 acres	1	0.3%	
4	5.1 - 7 acre	2	1%	

S. No.	Status of Land Holding in last 1-3 years (those with land holdings)	Count (N)	%	Reasons for change in the size of land holdings	
1	It has Decreased in size	13	3%	 Sold the existing land due to money need Now, there is no one in the family to cultivate the land Others, please specify 	
2	It has Increased in size	19	5%	Purchase new land due to increase in income	
3	No change in the size of land	350	92%	-	
Total		382	100%		

S. No.	Household s owns any livestock	Count (N)	%	Out of those who owns a livestock engaged in commercially selling livestock or goods produced from them	Count (N)	%
1	No	495	65%	No	135	50%
2	Yes	272	35%	Yes	137	50%
	Total	767	100%	Total	272	100%

S. No.	Respondent or any member of family doing farming	Count (N)	%
1	No	472	174%
2	Yes	173	64%
	Total		237%

(Total farmers = 173 + 107 = 280)

S. No.	Is there, any other member who is earning income		%
1	Don't Know	6	1%
2	No	673	88%
3	Yes	88	11%
	Total		

S. No.	What is the source of income for the other member		%
1	Daily Wage worker	56	64%
2	Farmer	2	2%
3	Salaried employment	14	16%
4	Seasonal Worker/ Agriculture	4	5%
5	Self-employed (small enterprise/ shop)	10	11%
6	Self-employed (small enterprise/ shop) (Daily Wage worker	1	1%
7	Social benefits/ government schemes	1	1%

Total	88	100%

S. No.	Utilization of IHHL	Households who had constructed toilet under IHHL scheme		Households who had received incentive Out of those constructing latrine under IHHL scheme	
	scheme	Count (N)	%	Count (N)	%
1	No	82	11%	3	0%
2	Yes	118	15%	115	15%
	Total	200	26%	118	15%

S. No.	Amount of incentive receive for constructing latrine under IHHL	Count (N)	%
1	5000	3	3%
2	5800	33	29%
3	6000	71	62%
4	12000	7	6%
5	58000	1	1%
	Total		100%

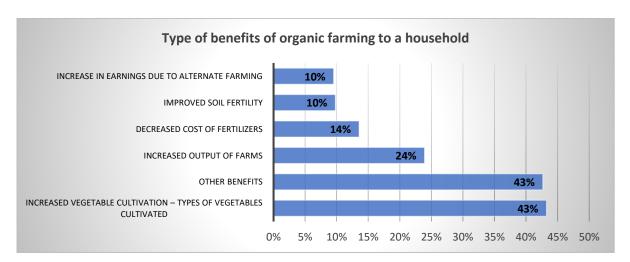
A.1.2 - NRM

S. No.	S. No. Awareness of households regarding activities being implemented for improving usage of natural resources related to farming		%
1	Cluster-based Vegetable Cultivation	62	8%
2	Organic Agriculture farming through the production of Vermin Compost	269	35%
3	Others	93	12%
4	Don't know	376	49%

S. No.	Households covered under these activities for improving usage of natural resources related to farming	Count (N)	%
1	Don't Know	5	1%
2	No	200	51%
3	Yes	186	48%
	Total	391 (51%)	100%

S. No	Relevance of the	Activities essential for your household based on opinion of the respondent		Activities essential based on opinion of	•
•	intervention	Count (N) %		Count (N)	%
1	Can't Say/ Not Sure	75	16%	12	3%
2	Extremely essential	110	24%	183	39%
3	Little essential	69	15%	62	13%
4	Somewhat essential	69	15%	74	16%

Total		465	100%	465	100%
5	Very essential	142	31%	134	29%



S. No.	Impact	Current status (Average estimates)	Before HRDP intervention (Average estimates)
1	Type of vegetables cultivated by a household	252	83
2	Expenditure on fertilizer per acre on farm in a year	11066	12244
3	Output of produce per acre of the farm in a year (in Kg)	3620	3786
4	Earning due to vegetable selling in a year	10067	15789

S. No.	Awareness of households regarding Natural Resource development/ Utilization	Count (N)	%
1	Don't know	357	47%
2	Irrigation through solar powered generators/ mechanism - Solar irrigation	324	42%
3	Any other, please specify	86	11%
Total		767	100%

S. No.	Households covered for Natural Resource development/ Utilization	Count (N)	%
1	Yes	225	55%
2	No	182	44%
3	Don't Know	3	1%
	Total	410	100%

S. No.	Benefits to the households or the village due to solar irrigation based on the opinion of the respondents	Count (N)	%
1	Can't Say/ Not sure	28	7%
2	Little benefit	73	18%
3	No benefit	2	0%
4	Significant benefits	189	46%

5	Some benefit	118	29%
	Total	410	100%

A.1.3. – SDLE

S. No.	Awareness of household related agriculture/farming and allied activities	Count (N)	%
1	Farm mechanization - Modern Farming practices like Shade net	136	18%
2	Drip irrigation	33	4%
3	Crop rotation	189	25%
4	Capacity building of Farmers on modern agriculture practices and demonstration of agriculture equipment	68	9%
5	Demonstration of SRI method of Paddy (SRI is a water saving method of cultivating rice)	24	3%
6	Adopting new ploughing technology and increase their yield through horticulture and pulse cultivation	42	5%
7	Others	57	7%
8	Don't know	412	54%

S. No.	Whether respondent or any other member of household have attended training/ workshops/ support activities for farming	Count (N)	%
1	No	191	54%
2	Yes	159	45%
3	Don't Know	5	1%
	Total	355	100%

S. No.	Type of Trainings/ support activities respondent or other family member involved	Count (N)	%
3	Crop rotation	91	57%
1	Farm mechanization - Modern Farming practices like Shade net	75	47%
4	Capacity building of Farmers on modern agriculture practices and demonstration of agriculture equipment	38	24%
6	Adopting new ploughing technology and increase their yield through horticulture and pulse cultivation	23	14%
5	Demonstration of SRI method of Paddy (SRI is a water saving method of cultivating rice)	19	12%
2	Drip irrigation	12	8%
7	Others	4	3%

S. No.	Methods adopted by households after exposure to these activities	Count (N)	%
1	Usage of modern farming equipment for ploughing	91	57%
5	Diversified crops	51	32%
3	Treatment of seeds and their usage	39	25%
6	Horticulture (vegetables/ flower growing)	24	15%
4	Micro irrigation	10	6%
2	Drip irrigation	9	6%
8	others	6	4%

9	No methods adopted	6	4%	ı
7	Pulse cultivation	4	3%	ì

S. No.	Relevance of intervention of SDLE	Based on opinion of respondents, whether activities related to agriculture/allied activities were essential for household		Based on opinion of respondents, whether activities related to agriculture/allied activities were essential for village	
		Count (N)	%	Count (N)	%
1	Can't Say/ Not Sure	70	16%	13	3%
2	Extremely essential	103	23%	151	34%
3	Little essential	68	15%	63	14%
4	Not at all essential	1	0%	*	*
5	Somewhat essential	75	17%	77	17%
6	Very essential	132	29%	145	32%
Total		449	100%	449	100%

S. No.	In case of benefit for household/ village, extent of benefit received from agriculture & allied activities under SDLE	Count (N)	%
1	Can't Say/ Not sure	26	7%
2	Little benefit	105	30%
3	No benefit	1	0%
4	Significant benefits	149	42%
5	Some benefit	74	21%
	Total		100%

S. No.	Impact	Current status (Average estimates)	Before HRDP (Average estimates)
1	Cost of irrigation per acre land (Rs)	5613	6147
2	Productivity of primary per acre land	15255	10618
3	Rate of primary produce per Kg	1370	1526
4	Earning from farming due to intervention in a year	52001	29955
5	Extra earning from alternative/ diversified crops/ produce (N=6)	23300	10167

S. No.	Awareness of households regarding livestock health, nutrition, overall management	Count (N)	%
1	Veterinary camp	266	35%
2	Capacity building on livestock management/ care	130	17%
3	Species breeding	104	14%
4	Others	54	7%
5	Don't know	437	57%

S.	Whether household have been covered any interventions related to	Count	%
No.	livestock management	(N)	
1	No	224	68%
2	Yes	106	32%
	Total	330	100%

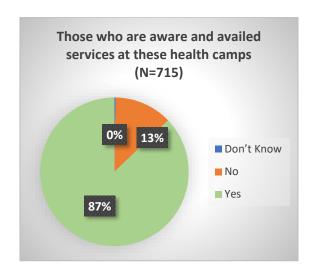
S. No.	Type of Interventions households were covered related to livestock management	Count (N)	%
1	Veterinary camp	97	92%
2	Capacity building on livestock management/ care	43	41%
3	Species breeding	23	22%
4	others	1	1%

S. No.	Extent of benefits due to activities related to livestock interventions	Count (N)	%
1	Can't Say/ Not sure	54	16%
2	Little benefit	44	13%
3	No benefit	1	0%
4	Significant benefits	145	44%
5	Some benefit	86	26%
	Total	330	100%

S. No.	Response	Whether respondent a member of any Self-Help Group		=	per of a family who is a ny Self-Help Group
		Count (N)	%	Count (N)	%
1	No	384	50%	497	65%
2	Yes	383	50%	265	35%
3	Don't Know	NA*	NA	5	1%
Total 767 100% 767 100%				100%	
*NA -	*NA - Not applicable				

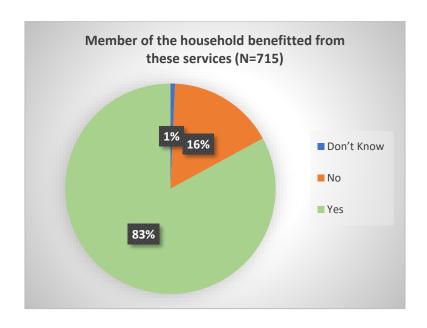
A.1.4. Health and sanitation

S. No.	Awareness of households about health camps being organized in village/area	Count	Column N %
1	Don't Know	13	2%
2	No	39	5%
3	Yes	715	93%
Total		767	100%



S. No.	Type of services availed by household during these medical camps	Count (N)	%
1	General health check-ups	621	100%
2	Distribution of medicines	197	32%
3	Referral to the health facilities	213	34%
4	Counselling services	232	37%
5	Others	0	0%

S. No.	Relevance of interventions	Activities essential for household		Activities essential for Village	
	related to health	Count (n)	%	Count (N)	%
1	Not at all essential	*	*	1	0%
2	Can't Say/ Not Sure	12	2%	4	1%
3	Extremely essential	211	30%	297	42%
4	Little essential	99	14%	99	14%
5	Somewhat essential	98	14%	90	13%
6	Very essential	295	41%	224	31%
Total		715	100%	715	100%



S. No.	Types of benefits received with these services	Count (N)	%
1	Your knowledge about health issues has improved	578	97%
2	You have easy access to the health personnel	294	50%
3	You have easy availability of medicines	209	35%
4	Now, you know where to get basic investigations done	181	31%
5	Now, you know where to go in case of emergency	175	30%
6	You have been or can be easily referred to higher facilities whenever required (treatment/ emergencies)	144	24%

S. No.	Members of household benefitted from these health camps based on perception	Count (N)	%
1	Agree	513	87%
2	Disagree	5	1%
3	Strongly Agree	55	9%
4	Strongly disagree	19	3%
5	Undecided	1	0%
	Total	593	100%

A.1.5. – Education

S. No.	Relevance - Activities essential for the school and child based on opinion of respondent	Count (N)	%
1	Can't Say/ Not Sure	5	1%
2	Extremely essential	143	33%
3	Little essential	51	12%
4	Somewhat essential	26	6%
5	Very essential	210	48%
	Total	435	100%

S. No.	Extent of benefits child received from these activities, based on opinion of respondents	Count (N)	%
1	Can't Say/ Not Sure	5	1%
2	Extremely benefitted	110	25%
3	Not at all benefitted	2	0%
4	Not so much Benefitted	7	2%
5	Somewhat Benefitted	99	23%
6	Very much benefitted	212	49%
	Total	435	100%

C No.	Number of days in a month a child attends school		
S. No.	Current status	Before HRDP	
Average	20	17	
Maximum	25	25	
Minimum	6	1	

In case the evaluation is in grades					
Range	Current status	Before HRDP			
A- to A+	46	53			
B- to B+	54	42			
C- to C+	7	12			
D to D+	1	1			
E/F	33	33			
Total	141	141			

In case the evaluation is in percentage				
Range	Current status	Before HRDP		
Average	70	61		
Max.	85	80		
Min.	55	35		

A.1.6. – Financial/digital literacy

S. No.	Awareness of households for improving financial/digital literacy	Count (N)	%
1	Knowledge on banking and services available	568	74%
2	Knowledge on Government schemes and benefits	112	15%
3	Mobile based learning - through internet	49	6%
4	Mobile based banking	46	6%
5	Online application filling for schemes and benefits	34	4%
6	Mobile based or online payment for services	42	5%
7	Any Other (Specify)	49	6%
8	Don't Know/ Can't Say	128	17%

S. No.	Respondent or any member has attended or trained under such activities	Count	Column N %
1	Don't Know	5	1%
2	No	381	60%
3	Yes	253	40%
	Total	639	100%

S. No.	Relevance of these activities based on opinion	Count (N)	%
1	Can't Say/ Not Sure	35	5%
2	Extremely essential	146	23%
3	Little essential	114	18%
4	Not at all essential	1	0%
5	Somewhat essential	91	14%
6	Very essential	252	39%
	Total	639	100%

S. No.	Extent of benefit received by household/ village from financial literacy interventions	Count (N)	%
1	Can't Say/ Not sure	7	1%
2	Little benefit	155	24%
3	No benefit	1	0%
4	Significant benefits	317	50%
5	Some benefit	159	25%
	Total	639	100%

Annexure 2 - Maharashtra Cluster

A.2.1. – Basic Profile

S. No.	Marital Status of respondents	Count (N)	%
1	Married	627	93%
2	Never married	30	4%
3	Widowed	15	2%
Total		672	100%

S. No.	Members in Household	Count (N)	Members in the household who are below 18 years of age	Count (N)	
1	Average	5	Average	2	
2	Maximum	20	Maximum	6	
3	Minimum	1	Minimum	1	

S. No.	Permanent resident or not	Count	%
1	No	19	3%
2	Yes	653	97%
Total		672	100%

S INO	Duration of staying of respondents in the village who are not the residents of the village	Count (N)	%
1	1-3 years	2	11%
2	3-5 years	6	32%
3	6 months to 1year	1	5%
4	8 – 10 years	2	11%
5	More than 10 years	8	42%
	Total	19	100%

S. No.	Other than primary earner who has attended school	Count (N)	%
1	No	355	53%
2	Yes	317	47%
	Total	672	100%

S. No.	Distribution of land holdings among households	Count (N)	%
1	0-1 acre	81	13%
2	1.1 - 3 acre	212	35%
3	3.1 - 5 acre	175	29%
4	5.1 - 7 acre	85	14%
5	7.1 - 9 acre	22	4%
6	9.1 - 11 acre	9	1%
7	>11 acres	23	4%
	Total	607	100%

S. No.	Status of Land Holding in last 1-3 years (those with land holdings)	Count (N)	%	Reasons for change in the size of land holdings
1	It has Decreased in size	1	0.2%	Sold the existing land due to money need
2	It has Increased in size	1	0.2%	Purchase new land due to increase in income
3	No change in the size of land	605	100%	
Total		607	100%	

S. No.	Primary work status of the primary earner	Count (N)	%
1	Farmer	537	80%
2	Salaried employment	44	7%
3	Daily Wage worker	42	6%
4	Self-employed (small enterprise/ shop)	29	4%
5	Others	10	1%
6	Seasonal Worker/ Agriculture	8	1%
7	Unemployed	2	0%
	Total		

S. No.	Households owns any livestock	Count (N)	%	Out of those who owns a livestock engaged in commercially selling livestock or goods produced from them	Count (N)	%
1	No	336	50%	No	161	48%
2	Yes	336	50%	Yes	175	52%
Т	otal	672	100%	Total	336	100%

S. No.	Respondent or any member of family doing farming	Count (N)	%
1	No	74	27%
2	Yes	61	22%
	Total		50%

(Total farmers - 537 + 61 = 598)

S. No.	What is the source of income for the members	Count	%
1	Self-employed (small enterprise/ shop)	8	7%
2	Salaried employment	63	57%
3	Daily wage worker	18	16%
4	Seasonal worker/Agriculture	1	1%
5	Farmer	14	13%
6	Horticulture	0	0%
7	Livestock	5	5%

8	Social benefits/ Government schemes	0	0%
9	Others, please specify	4	4%

S. No.	Average monthly income contributed by other family member towards household	Count
1	Average	19192
2	Maximum	800077
3	Minimum	750

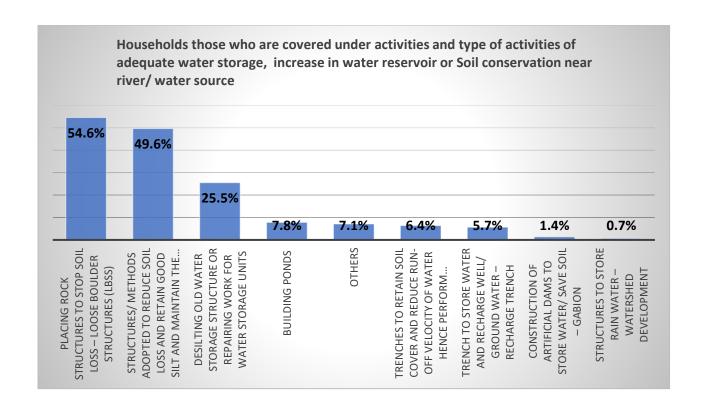
S. No.	Has the income of other members income increased in last 1-3	Count	%
1	Don't Know	3	3%
2	No	83	75%
3	Yes	24	22%
	Total	110	100%

A.2.2 – NRM

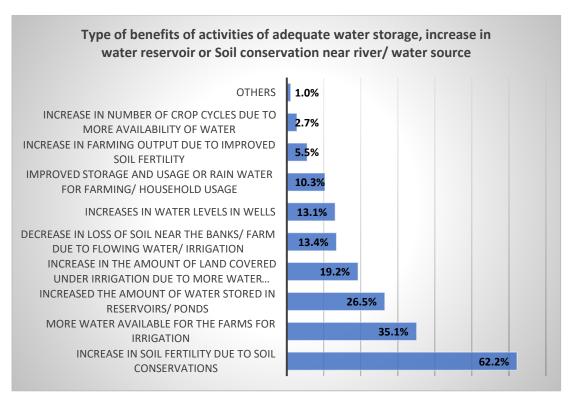
S. No.	Awareness of activities for adequate water storage/ increase in water reservoir or Soil conservation near river/ water source	Count (N)	%
1	Desilting Old water storage Structure or Repairing Work for water storage units	93	14%
2	placing rock structures to stop soil loss - Loose Boulder Structures (LBSs)	174	26%
3	Construction of artificial dams to store water/ save soil – Gabion	30	4%
4	Structures/ Methods adopted to reduce soil loss and retain good silt and maintain the water in Farms - Farm Bunding/ Cement nala bund	182	27%
5	trenches to retain soil cover and reduce run-off velocity of water hence perform integrated soil and water conservation - Water Absorption Trench (WAT)	84	13%
6	Trench to store water and recharge well/ ground water - Recharge Trench	69	10%
7	Building Ponds	24	4%
8	Structures to store rain water - watershed development	12	2%
9	Others	9	1%
10	Don't know	350	52%

S. No.	Households covered under activities related to adequate water storage/ increase in water reservoir or Soil conservation near river/ water source	Count (N)	%
1	Don't Know	20	6%
2	No	161	50%
3	Yes	141	44%
	Total	322	100%

(322 + 350 = 672)



S. No.	Relevance of the intervention			Interventions either aware of or your household is covered essential for your village	
		Count (N)	%	Count (N)	%
1	Extremely essential	41	9%	79	17%
2	Can't Say/ Not Sure	60	13%	56	12%
3	Little essential	17	4%	13	3%
4	Not at all essential	9	2%	1	0%
5	Somewhat essential	51	11%	48	10%
6	Very essential	284	61%	265	57%
	Total	462	100%	462	100%

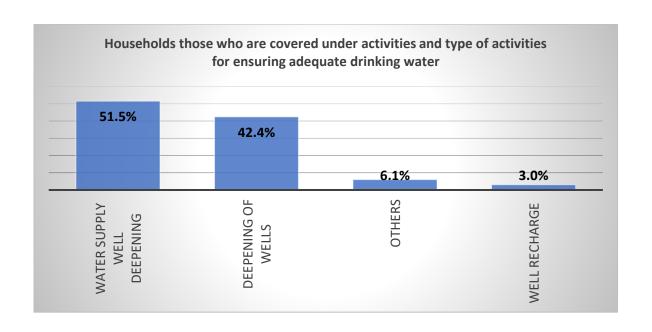


S. No.	Impact	Current status (average estimates)	Before HRDP (average estimates)
1	Current output (in KG) for the main produce in a year	7449 (24% increase)	6026
2	Current number of crop cycles in a year on the farm	2	2

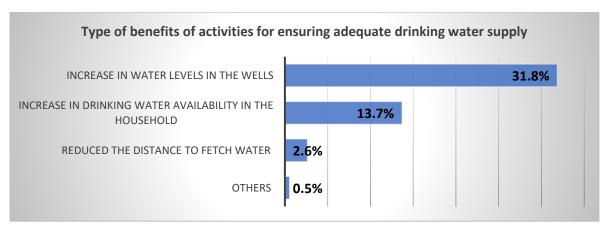
S. No.	Awareness of activities for ensuring adequate availability of drinking water in your area/village	Count (N)	%
1	Well Recharge	21	3%
2	Water Supply Well Deepening	80	12%
3	Deepening of wells	86	13%
4	others	4	1%
5	Don't know	506	75%

S. No.	Households covered under activities for ensuring adequate supply of drinking water	Count (N)	%
1	Don't Know	13	8%
2	No	120	72%
3	Yes	33	20%
Total		166	100%

(506 + 166 = 672)



S. No.	Benefit of activities of adequate water storage, increase in water reservoir or Soil conservation near river/ water source (based on opinion)	Count	%
1	Can't Say/ Not sure	28	9%
2	Little benefit	9	3%
3	No benefit	3	1%
4	Significant benefits	149	46%
5	Somewhat Benefitted	133	41%
	Total	322	100%



S. No.	Awareness of activities for ensuring adequate availability of drinking water in your area/village	Count (N)	%
1	Well Recharge	21	3%
2	Water Supply Well Deepening	80	12%
3	Deepening of wells	86	13%
4	others	4	1%
5	Don't know	506	75%

S. No.	Benefits of activities for ensuring adequate drinking water supply	Count	%
1	Can't Say/ Not sure	13	8%
2	Little benefit	6	4%
3	No benefit	1	1%
4	Significant benefits	70	42%
5	Somewhat Benefitted	76	46%
Total		166	100%

S. No.	Frequency of availability of drinking water in Cu		Current status		Before HRDP	
3. NO.	households	Count (N)	%	Count (N)	%	
1	At least 4 days a week and for a limited time period (like few hours)	5	10%	10	19%	
	At least Three days a week and for a limited time period (like few hours)	3	6%	5	10%	
3	Daily 24*7	26	50%	15	29%	
4	Daily but for a limited time period (like few hours)	17	33%	19	37%	
5	Less than three days a week	1	2%	3	6%	
	Total	52	100%	52	100%	

S. No.	Awareness of activities for promoting the use of existing natural resources or clean energy	Count (N)	%
1	Solar Street Lights installation	135	20%
2	Smokeless Stoves	181	27%
3	Solar Handheld Battery Lights	55	8%
4	Solar Water Pumps	18	3%
5	Bio-gas production	37	6%
6	Any other, please specify	19	3%
7	Don't know	368	55%

S. No.	Households covered under activities for natural resource utilization / clean energy usage	Count (N)	%
1	Don't Know	13	4%
2	No	152	50%
3	Yes	139	46%
Total		304	100%

(368 + 304 = 672)

	S. No.	Benefits of Solar Lights for household/ village	Count (N)	%
	1	Can't Say/ Not sure	18	11%
Ī	2	Little benefit	1	1%

	Total	168	100%
5	Somewhat Benefitted	88	52%
4	Significant benefits	58	35%
3	No benefits	3	2%

S. No.	Benefit of Solar Water Pumps for household (based on opinion) (N=18)	Count	%
1	Can't Say/ Not sure	1	6%
2	Little benefit	3	17%
3	Significant benefits	11	61%
4	Somewhat Benefitted	3	17%
	Total	18	100%

S. No.	Cost of irrigation for farm in a year	Current status Count	Before HRDP Count
1	Average	55000	57500
2	Maximum	70000	70000
3	Minimum	40000	45000

S. No.	How much benefit Smokeless Stoves; and Bio-gas production	Count	Column N %
1	Can't Say/ Not sure	22	11%
2	Little benefit	15	7%
3	No benefit	6	3%
4	Significant benefits	73	36%
5	Somewhat Benefitted	89	43%
	Total	205	100%

C No	Cost of fuel usage for Household purposes in a month	Current status	Before HRDP	
S. No.	Cost of fuel usage for Household purposes in a month	Count	Count Count 1436 1876 16000 11000	
1	Average	1436	1876	
2	Maximum	16000	11000	
3	Minimum	50	500	

A.2.3. – SDLE

S. No.	Awareness of Households regarding activities of agriculture/farming and allied activities	Count (N)	%
1	Visit to Farmer Field School to empower local farmers and help them to solve their livelihood problems by themselves	62	9%
2	Training in horticulture with Drip Irrigation and Crop Diversification	77	11%
3	Exposure visits of farming practices	47	7%
4	Smart Farming including use of Technology and Modern Equipment's like Shade Nets and Drip unit with tank	19	3%

5	Bio fertilizers and Treatment of seeds	81	12%
6	Micro-Irrigation Exposure visit	5	1%
7	Others	12	2%
8	Not Aware/ Don't Know	481	72%

S. No.	Respondents or any member attended training/ workshops/ support activities for farming	Count (N)	%
1	Don't Know	5	3%
2	No	94	49%
3	Yes	92	48%
Total		191	100%

(481 + 191 = 672)

S. No.	Type of Trainings/ support activities respondent or other family member involved	Count (N)	%
1	Farmer Field School to empower local farmers and help them to solve their livelihood problems by themselves	21	23%
2	Training in horticulture with Drip Irrigation and Crop Diversification	36	39%
3	Exposure visits of farmers practices	29	32%
4	Smart Farming including use of Technology and Modern Equipment's like Shade Nets and Drip unit with tank	12	13%
5	Bio fertilizers and Treatment of seeds	26	28%
6	Micro-Irrigation Exposure visit	3	3%
7	Others	11	12%
8	Don't know	4	4%

S. No.	Methods adopted by households after exposure to these activities	Count (N)	%
1	Usage of modern farming equipment like Shade Nets and Drip unit with tank	11	12%
2	Usage of Bio-fertilizers	20	22%
3	Treatment of seeds and their usage	25	27%
4	Micro irrigation/ drip irrigation	27	29%
5	Diversified crops/ horticulture (vegetables/ flower growing)	5	5%
6	Others	7	8%
7	Not Adopted Any method yet	27	29%

S. No.	Relevance of interventions	Based on opinion of respondents, whether activities related to agriculture/allied activities were essential for household Based on opinion of respondents, whether activities related to agriculture/allied activities were essential for village		respondents, whether activities related to agriculture/allied activities		related to
		Count (N)	%	Count (N)	%	
1	Can't Say/ Not Sure	16	6%	21	8%	
2	Extremely essential	45	17%	52	20%	
3	Little essential	11	4%	6	2%	

Total		264	100%	264	100%
6	Very essential	145	55%	154	58%
5	Somewhat essential	29	11%	31	12%
4	Not at all essential	18	7%		

S. No.	Impact	Current status (Average estimates)	Before HRDP (Average estimates)
1	Cost of irrigation per acre land (Rs)	12788	14325
2	Productivity of primary per acre land	4368	3392
3	Cost of fertilizing per acre land due to interventions in a year	4310	5158
4	Current rate per Kg of the primary produce	22	19
5	Earning from farming due to intervention in a year	118143	69714
6	Extra earning from alternative/ diversified crops/ produce (N=5)	22000	6750

S. No.	Benefits of activities like, Farmer Field School visits, Training in horticulture with Drip Irrigation and Crop Diversification, Exposure visits of farmers practices, Smart Farming including use of Technology and Modern Equipment, Bio fertilizers and Treatment of seeds. Micro-Irrigation Exposure visit	Count (N)	%
1	Can't Say/ Not sure	15	8%
2	Little benefit	7	4%
3	No benefit	1	1%
4	Significant benefits	92	48%
5	Somewhat Benefitted	76	40%
Total		191	100%

S. No.	Awareness of household livestock health, nutrition, overall management	Count (N)	%
1	Animal Health Camps	110	16%
2	Deworming of Animals	80	12%
3	Improved nutrition - Mineral distribution/ Nutrition knowledge	27	4%
4	Demonstration on Moor grass development and Distribution of moor grass	24	4%
5	Milking machines	18	3%
6	Chaff-Cutters	22	3%
7	Loose House system	8	1%
8	Livestock Water Tanks	5	1%
9	Goat farming promotion	14	2%
10	Poultry farming promotion	13	2%
11	Others	12	2%
12	Not Aware/ Don't Know	497	74%

S. No.	Households covered under interventions for livestock health, nutrition, overall management	Count (N)	%
1	Don't Know	6	3%
	No	78	45%
2	Yes	91	52%
	Total	175	100%

(497 + 175 = 672)

S. No.	Type of Interventions households were covered related to livestock management	Count (N)	%
1	Animal Health Camps	39	43%
2	Deworming of Animals	33	36%
3	Improved nutrition - Mineral distribution/ Nutrition knowledge	8	9%
4	Demonstration on Moor grass development and Distribution of moor grass	14	15%
5	Milking machines	5	5%
6	Chaff-Cutters	7	8%
7	Loose House system	3	3%
8	Livestock Water Tanks	0	0%
9	Goat farming promotion	4	4%
10	Poultry farming promotion	6	7%
11	Any other Specify	13	14%

S. No.	Benefits of activities related to livestock management	Count	Column N %
1	Can't Say/ Not sure	21	12%
2	Little benefit	4	2%
3	No benefit	1	1%
4	Significant benefits	87	50%
5	Somewhat Benefitted	62	35%
	Total	175	100%

S. No.	Response	Whether respondent a member of any Self-Help Group		Any other member of a family who is a member any Self-Help Group	
	·	Count (N)	%	Count (N)	%
1	No	509	76%	5	1%
2	Yes	163	24%	411	61%
3	Don't Know	NA*	NA	256	38%
To	tal	672	100%	672	100%
*NA - Not ap	*NA - Not applicable				

A.2.4. – Health and sanitation

S. No.	Health camps being organized in	Awareness of households		·		
	village/area	Count (N)	%	Count (N)	%	
1	Don't Know	160	24%	2	1%	
2	No	219	33%	77	26%	
3	Yes	293	44%	214	73%	
Total		672	100%	293	100%	

S. No.	Services at health camps	Households' know about services be provided during to camps Count (N)	eing	Type of services by householder health came	_
1	General health check-ups	290	99%	207	97%
2	Distribution of medicines	128	44%	93	43%
3	Referral to the health facilities	41	14%	41	19%
4	Counselling services	4	1%	3	1%
5	Others	6	2%	6	3%

S. No.	Households benefitted from the medical camps	Count	Column N %
1	Don't Know	4	1%
2	No	75	26%
3	Yes	214	73%
	Total	293	100%

S. No.	Members of household benefitted from these health camps based on perception	Count (N)	%
1	Agree	118	55%
2	Disagree	2	1%
3	Strongly Agree	82	38%
4	Strongly disagree	6	3%
5	Undecided	6	3%
	Total	214	100%

A.2.5. – Education

S. No.	Awareness of the households regarding activities done in school	Count (N)	%
1	Painting of schools	77	70%
2	School given sports materials	37	34%
3	School given musical instruments	4	4%
4	School provided books for library	5	5%
5	Repair of roof/ walls	16	15%
6	Digital Classrooms - Parivartan Kaksha Established	50	45%

7	Educational Science kits given	15	14%
8	Others	2	2%
9	Can't Say/ Don't Know	26	24%

S. No.	Whether the activities in school were required/ essential for school and child	Count (N)	%
1	Can't Say/ Not Sure	4	2%
2	Extremely essential	49	25%
3	Little essential	8	4%
4	Somewhat essential	20	10%
5	Very essential	119	60%
	Total	200	100%

S. No.	Whether you child was benefitted from these activities in school	Count (N)	%
1	Can't Say/ Not Sure	5	3%
2	Little benefit	4	2%
3	No benefit	2	1%
4	Significant benefits	117	59%
5	Somewhat Benefitted	72	36%
	Total	200	100%

In case the evaluation is in grades						
Dange	Current status Before HRDP			Current status		HRDP
Range	Count (N)	%	Count (N) %			
A- to A+	20	42%	13	27%		
B- to B+	24	50%	27	56%		
C- to C+	4	8%	6	13%		
D to D+			2	4%		
Total	48	100%	48	100%		

A.2.6. – Financial/ digital literacy

S. No.	Awareness about activities for the improving financial/digital literacy	Count (N)	%
1	Knowledge on banking and services available	90	13%
2	Knowledge on Government schemes and benefits	59	9%
3	Mobile based learning - through internet	73	11%
4	Mobile based banking	46	7%
5	Online application filling for schemes and benefits	31	5%
6	Mobile based or online payment for services	56	8%
7	Others	11	2%
8	Don't Know/ Can't Say	530	79%

S. No.	Whether households have attended or trained under such activities	Count (N)	%
1	Don't Know	10	7%
2	No	56	39%
3	Yes	76	54%
	Total	142	100%

(530 + 142 = 672)

S. No.	Type of activities for which households were part of or given training	Count (N)	%
1	Knowledge on banking and services available	51	67%
2	Knowledge on Government schemes and benefits	39	51%
3	Mobile based learning - through internet	38	50%
4	Mobile based banking	9	12%
5	Online application filling for schemes and benefits	9	12%
6	Mobile based or online payment for services	14	18%
7	Others	8	11%

S. No.	Relevance	Whether the activities were essential for your household		Whether the activities were essential for your village	
		Count (N)	%	Count (N)	
1	Can't Say/ Not Sure	5	4%	6	4%
2	Extremely essential	32	23%	41	29%
3	Little essential	5	4%	2	1%
4	Somewhat essential	16	11%	14	10%
5	Very essential	84	59%	79	56%
	Total		100%	142	100%

S. No.	Whether the activities benefitted the households	Count (N)	%
1	Can't Say/ Not sure	8	6%
2	Little benefit	4	3%
3	Significant benefits	83	58%
4	Somewhat Benefitted (47	33%
	Total		100%

Annex 4: Domain wise activities

Domein	Activities Done		
Domain	Bihar	Maharashtra	
	Cluster based Vegetable Cultivation	Desilting Old water storage Structure or Repairing Work for water storage units	
	Organic Agriculture farming through the production of Vermin Compost	placing rock structures to stop soil loss - Loose Boulder Structures (LBSs)	
		Construction of artificial dams to store water/ save soil – Gabion	
		Structures/ Methods adopted to reduce soil loss and retain good silt and maintain the water in Farms - Farm Bunding/ Cement nala bund	
NRM		trenches to retain soil cover and reduce run-off velocity of water hence perform integrated soil and water conservation - Water Absorption Trench (WAT)	
NRIVI		Trench to store water and recharge well/ ground water - Recharge Trench	
		Building Ponds	
		Structures to store rain water - watershed development	
		Well Recharge	
		Water Supply Well Deepening	
		Deepening of wells	
		Solar Street Lights installation	
		Smokeless Stoves	
		Solar Handheld Battery Lights	
		Solar Water Pumps	
		Bio-gas production	

Damain	Activities Done			
Domain	Bihar	Maharashtra		
	Farm mechanization - Modern Farming practices like Shade net	Visit to Farmer Field School to empower local farmers and help them to solve their livelihood problems by themselves		
	Drip irrigation	Training in horticulture with Drip Irrigation and Crop Diversification		
	Crop rotation	Exposure visits of farming practices		
	Capacity building of Farmers on modern agriculture practices and demonstration of agriculture equipment	Smart Farming including use of Technology and Modern Equipment's like Shade Nets and Drip unit with tank		
	Demonstration of SRI method of Paddy (SRI is a water saving method of cultivating rice)	Bio fertilizers and Treatment of seeds		
	Adopting new ploughing technology and increase their yield through horticulture and pulse cultivation	Micro-Irrigation Exposure visit		
SDLE	Veterinary camp	Animal Health Camps		
	Capacity building on livestock management/ care	Deworming of Animals		
	Species breeding	Improved nutrition - Mineral distribution/ Nutrition knowledge		
		Demonstration on Moor grass development and Distribution of moor grass		
		Milking machines		
		Chaff-Cutters Chaff-Cutters		
		Loose House system		
		Livestock Water Tanks		
		Goat farming promotion		
		Poultry farming promotion		
Health and	General health check-ups	General health check-ups		
Health and Sanitation	Distribution of medicines	Distribution of medicines		
	Referral to the health facilities	Referral to the health facilities		
	Counselling services	Counselling services		

Domein	Activities Done		
Domain	Bihar	Maharashtra	
	Painting/ beautification of schools	Painting of schools	
	Increased amenities within schools	School given sports materials	
	Training on waste management – waste segregation	School given musical instruments	
Education	Smart Classes	School provided books for library	
	Remedial Classes for Primary school students	Repair of roof/ walls	
	Orientation of teachers and students on digital learning	Digital Classrooms - Parivartan Kaksha Established	
		Educational Science kits given	
	Knowledge on banking and services available	Knowledge on banking and services available	
Financial and Digital	Knowledge on Government schemes and benefits	Knowledge on Government schemes and benefits	
Financial and Digital literacy	Mobile based learning - through internet	Mobile based learning - through internet	
cracy	Mobile based banking	Mobile based banking	
	Online application filling for schemes and benefits	Online application filling for schemes and benefits	
	Mobile based or online payment for services	Mobile based or online payment for services	