Social Return On Investment

Evaluation of Reliance Foundation's Bharat India Jodo Programme

December
2020

Reliance Foundation

SUSTAINABLE SQUARE

Acknowledgement

We would like to thank all our team members for helping us produce this report, we are grateful for their continued support through the entire assessment process.

As part of this study was been conducted as India battled the COVID-19 pandemic, we would like to take a moment to appreciate the Monitoring & Evaluation team and the Programme team for overseeing this exercise throughout a difficult period of time.

Independent Evaluation Statement

The Social Return on Investment (SROI) study, commissioned by the Reliance Foundation, has been conducted independently by Sustainable Square India Private Limited. The study has been conducted following Social Value International's SROI guidelines and principles.

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List of Abbreviations

ABF	Axis Bank Foundation
ACF	Ambuja Cement Foundation
APMC	Agricultural Produce Market Committee
RF BIJ	Reliance Foundation Bharat India Jodo
FES	Foundation for Ecological Security
FGD	Focus Group Discussion
FMNR	Farmer-Managed Natural Regeneration
FPO	Farmer Producer Organization
GDP	Gross Domestic Product
HH	Household
HUF	Hindustan Unilever Foundation
IDI	In-Depth Interview
M&E	Monitoring and Evaluation
RF	Reliance Foundation
RNG	Reliance Nutrition Garden
SHG	Self Help Group
SROI	Social Return on Investment
VA	Village Association
VDF	Village Development Fund
VDP	Village Development Plans
VSTF	Village Social Transformation Foundation
WRM	Water Resource Management
WTG	Women Thrift Group

Executive Summary

The Reliance Foundation's Bharat India Jodo (RF BIJ) programme has been instrumental in improving the standard of living and generating accessible livelihood opportunities for households situated in rural communities across India. The developmental gap between rural and urban India has necessitated a dependency on urban centres for mass income generation and work opportunities. Despite farming being the main occupation in rural areas, farmers continue to be disproportionately affected by low-income, poor market links, limited access to technology and finance, and other corresponding challenges.

Seeking to remedy these matters, the RF BIJ Programme has actively contributed towards rebuilding rural communities by embedding self-reliance within them. The programme which was started in 2012 is now operational in 12 states across the country. Their approach has focused on empowering rural communities to take collective action towards developing sustainable livelihoods, primarily through institution building - namely Village Associations (VAs), Farmer Producer Organizations (FPOs) and Women Thrift Groups (WTGs) or Self Help Groups (SHGs). In turn, these institutions work in areas of employment promotion, food security, water security and ecological security for the rural communities they operate in. The programme has also worked with grassroots organisations and technical resource agencies to share best practices and create a repository of knowledge for its beneficiary stakeholders.

To measure the impact of the programme and its operations over the years, this evaluation has applied a Social Return on Investment (SROI) analysis to identify which programme outcomes have created the most value in the lives and occupations of key stakeholders. The evaluation finds that the SROI ratio of the RF BIJ programme ranged from 1:9.11 to 1:10.93, with 1:10.66 being the most likely SROI ratio. This means that for every ₹1 invested in the programme, there is a stakeholder return of over **₹10.66**. In conjunction, the SROI evaluation has highlighted an opportunity for the programme's implementation team to reflect upon interventions which need to be strengthened to ensure that the programme maximises its potential for impact and operates sustainably.

2012

Input Cost

₹441.87 Cr

Programme Activities

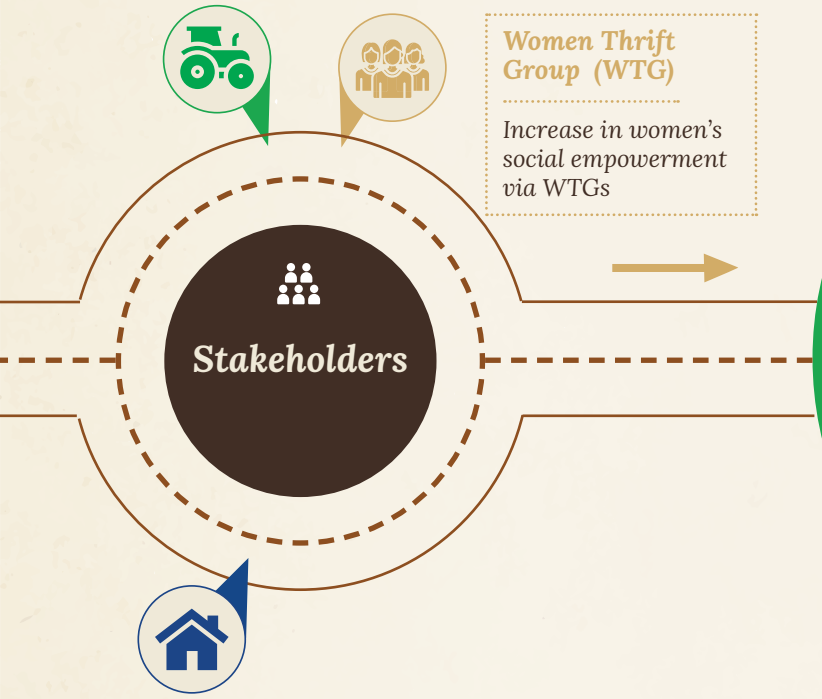
1. *Renovation and constructions of Water Harvesting Structures*
2. *De-risking agriculture using climate friendly and modern techniques*
3. *Land improvement for increasing agricultural productivity*
4. *Institution building at grassroot level*
5. *Ecological restoration by promoting local biodiversity and tree plantation*

Farmer Producer Organization (FPO)

- *Increased satisfaction in the sale of agricultural produce*
- *Increased satisfaction in the purchase of agricultural inputs*

Women Thrift Group (WTG)

Increase in women's social empowerment via WTGs



Social Value Created

₹ 4710 Cr

Village Association Households (HH)

- *Increase in community ownership*
- *Increase in access to social security measures*
- *Increase in practices to ensure ecological balance*
- *Increase in sustainable agricultural practices*
- *Increase access to water resources*
- *Reduction in illnesses*
- *Improvement in economic status of HHs due to agriculture*
- *Increase in household expenditure*

SROI Ratio

1 : 10.66

For every ₹ 1 invested into the programme, there is a return to the stakeholders of over ₹ 10.66 each.

Programme Introduction

> *More than 85% of farmers in India are categorised as small or marginal farmers who own less than two hectares of landholdings.*

Constantly battling to survive, they struggle to hone the productivity of their modest pieces of rain-fed land that feature little to no irrigation facilities. Asymmetric knowledge, inadequate credit facilities, dated equipment and a lack of market representation has forced agricultural workers to migrate to cities in search of employment post monsoon season.

> *Agriculture continues to be the key driver of rural economies, contributing to nearly 16% of the nation's Gross Domestic Product (GDP).*

It is also the primary sector of employment and employed 42.39% of the country's workforce in 2019. However, the gross income generated by agricultural workers is much lower in comparison to its counterparts in the industry and services sector. In such a scenario, inequality and divide between rural and urban India is widening. While the per capita income and standard of living of urban Indians are augmenting; issues of low productivity and revenue continue to hinder the growth and prosperity of vulnerable farmers across the nation.

> *In response, the Reliance Foundation initiated its flagship programme '**Bharat India Jodo**' in 2010, to empower marginalised communities and improve their standard of living and livelihood opportunities.*

This programme aims to:

- *Reduce rural distress through agriculture related interventions*
- *Provide necessary accommodation to build self-reliance*
- *Institution building for promoting collective decision making*
- *Strengthen the autonomy of the farming communities by equipping marginal farmers with the means to de-risk farming.*
- *Educate farmers on sustainable agricultural practices.*
- *Involve direct action and the participation of beneficiaries for sustainable development.*
- *Improve market access of farmers and provide alternatives for purchase and sale of agricultural inputs*
- *In the past nine years, RF BIJ has transformed some of the most impoverished agrarian-based regions of India into flourishing communities.*

Programme Details

> *The RF BIJ programme aims to make 'farming-as-the-first-choice-profession' among its beneficiaries at a time when rural communities are facing a plethora of problems due to lack of livelihood options.*

The programme does so by assisting institutions at various levels and for different stakeholders. These groups work in tandem to provide solutions for the average agrarian worker's issues. The programme also works with grassroot organisers and technical resource agencies to accumulate resources and best practices for the benefit of its stakeholders.

Table 1: Programme Strategy and Approach

Community Institutions under RF BIJ are as follows:	RF BIJ interventions can be classified as follows:
• ***Village Associations*** - *Members of rural communities collected into formalised groups for village development.* • ***Farmer Producer Organization*** - *Legal entity working to meet the needs of its farmer members.* • ***Women Thrift Groups or Self-Help Groups*** - *Grassroots institutions for members to engage in micro-saving, micro-lending and socio-political issues.*	• ***Institution Building*** – *Establishing of village associations, women groups and creating/ strengthening of Farmer Producer Groups.* • ***Nutrition Security*** – *Promoting nutritional intake of rural households through the promotion of Reliance Nutrition Gardens (RNGs).* • ***Food Security*** – *Promotion of sustainable farming practices and engaging in transforming infertile land into productive land.* • ***Water Security*** – *Renovation and constructions of Water Harvesting Structures.* • ***Ecological Security*** – *Landscape re-vegetation, soil and moisture conservation, preparation of biodiversity registers.* • ***Income Security*** – *Improving income and savings, improving agricultural contribution to the income of beneficiaries including access to markets and alternate livelihood options.*

Engagements with RF BIJ Beneficiaries

Institution Building

The Institution Building intervention focuses on the formation or strengthening of the following institutions:

Village Associations (VAs):

- VAs are institutions consisting of village members, including small and marginal farmers and landless households. They are one of the decision-making bodies that undertake rural transformation activities in their village.
- VA members make collective decisions for village development by formulating yearly Village Development Plans (VDPs) and working along with other self-governing associations in their village, such as panchayats, women groups and other local organisations.
- VAs provide a platform for both male and female members of the household to be part of village-level decision making. As VAs are made up of community members, they are well-equipped to identify the right needs and solutions as well as community leaders to sustain their initiatives.

Farmer Producer Organizations (FPOs):

- FPOs are farmer-owned and managed companies that seek to organise farmers into collectives to improve their bargaining strength in the market, as well as provide market alternatives for both the purchase and sale of agricultural inputs.
- FPOs are registered under the Companies Act and are a type of Producer Organisation (PO) wherein the farmers are registered members and shareholders.
- FPO members leverage their collective strength and bargaining power to access financial and non-financial aids, services and appropriate technologies, ultimately leading to value chain development. They also tap into high-value markets and enter into partnerships with private entities on equitable terms.

Women Thrift Groups (WTGs) or Self-Help Groups (SHGs):

- *WTGs or SHGs are institutions for women from the community to engage in micro-saving, micro-lending and socio-political discourse. Via SHGs, RF BIJ aims to engage women as active stakeholders in their village development initiatives by encouraging collective negotiation.*
- *WTGs/SHGs aim to empower women by encouraging them to take control of their lives. WTGs/SHGs rely on the collective ability of their female members to negotiate their gender, caste, class and other interests vis-a-vis institutions of the market, the state and the community.*

> ***"Formation of strong institutions is vital for the successful implementation of the below-mentioned interventions.***

Women members of SHG

Food and Nutrition Security

> *The Food and Nutrition Security intervention promotes and recognises sustainable agricultural practices as a driver to improved food productivity and nutrition for its target population.*

Through continued support to develop an ecosystem for sustainable agricultural practices, RF BIJ designs this intervention to maximise the utilisation of local resources to manage the short-term requirements of households as well as those in the long term. The programme has recognised the development of backyard kitchen gardens as a routine practice in rural households and, thus, leverages these backyard gardens to increase nutritional intake and promote best practices via the Reliance Nutrition Gardens (RNG). RNGs produce a variety of vegetables, fruits and medicinal crops for the household's nutritional security, and are led primarily by women to ensure active participation in household decision making. Overall, the activities under this intervention focus on increasing production of agricultural output, thereby ensuring income and food safety.

Water Security

“The Water Security intervention focuses on enhancing the availability of water for agriculture and domestic usage.

Degradation of water management in villages, dilapidated water harvesting structures, and unpredictable monsoons have resulted in water scarcity, which has become a cause of concern in the areas in which the programme operates. As a result, RF BIJ works with village communities to revive traditional water governance and advancement through the adoption of appropriate water harvesting and conservation methods. RF BIJ emphasises water efficiency through drip irrigation, sprinkler technology and better crop planning. Facilitation of localised water budgeting is also a key focus area of this intervention.

Lift irrigation pump in Jamai

Ghataparkurd (Rajnandgaon) VA president at the water harvesting structure in the village

Ecological Security

The Ecological Security intervention focuses on promoting environmental protection by undertaking activities to promote sustainable agriculture practices, water conservation and increasing green cover with large-scale plantations on farm land and common land.

Income Security

The RF BIJ programme envisages community institutions and interventions in the mentioned fields to contribute towards increasing the earning capacity of small and marginal farmholders.

Case

Agricultural training helped Tejulal in earning profits from his barren land

Tejulal Yadav of Bapcha village grew up in an impoverished household. He had completed his Masters in Chemistry and also held a B.Ed degree. Hence, he taught in his village's government school. His family also had some land which was in poor condition. However, he could not make use of it due to his lack of relevant skills.

When RF BIJ came to his village, they helped Tejulal mend his land by providing him with fertilisers and seeds and assisting him with bamboo plantation. The land now gives him a profit of ₹1 lac per year. Tejulal mentions that he does farming in a more technical way due to the agricultural knowledge gained from these interventions.

FPO Procurement centre in Phuljhar, Jasdan

Creation of community institutions is central to the success of RF BIJ intervention since these institutions not only aid in organising rural community members, but also provide leadership and management skills that are necessary to achieve the programme's objectives. Similarly, the interventions and activities undertaken by RF BIJ and its institutions are correlated and codependent, to elevate the target communities holistically.

Table 2: RF BIJ Programme's Progression over the years - Overview*

Clusters' Year of Initiation	No. of Villages in Cluster
2011-12	167
2012-13	285
2013-14	54
2014-15	42
2018-19	12
Total	**560**

"In the beginning, we thought Reliance would take away our land; therefore, it took us 1.5 years to trust them.

But the work done since then has been phenomenal. We have water available throughout the year, and the agricultural production has doubled to 20 quintals an acre."

In its nine years of operation, the RF BIJ program has impacted

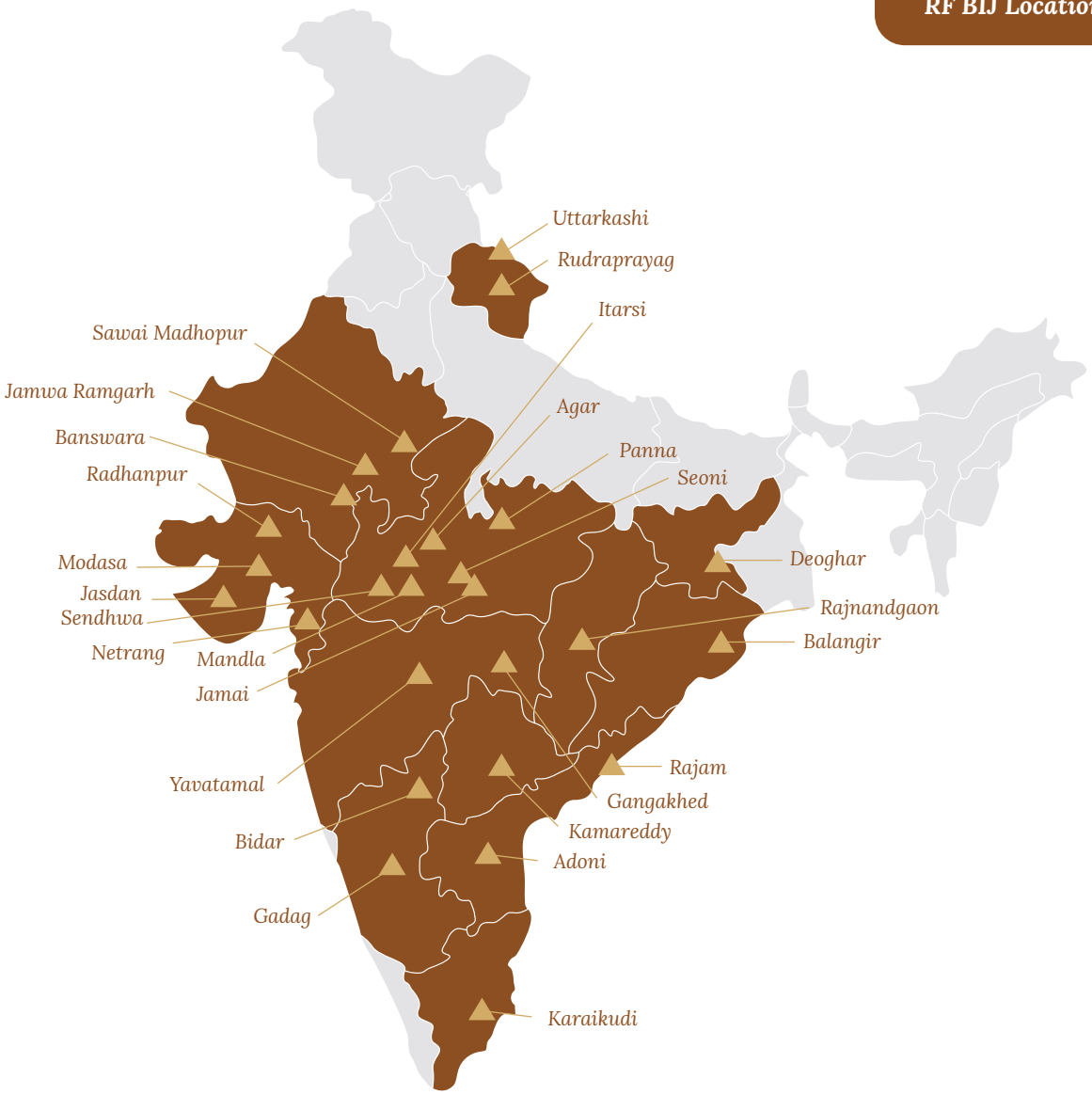
12 **STATES**
across India consisting of ***132 talukas*** *and* ***560 villages***

68,792 *Households via Village Associations*

43,387 *Average number of farmers transacted with each year*

15,000 *Women via SHGs*

RF BIJ Locations



Research Methodology

About Social Return on Investment (SROI)

SROI is an outcomes-based measurement tool that helps organisations in understanding and quantifying the social, environmental and economic value that they are creating through their social initiatives. It does so by assigning monetary value to the amount of change created and compares this with the cost incurred in producing that benefit. By placing an economic value on these outcomes, the framework not only aids in understanding whether these social initiatives have been successful, but it also puts social impact into the language of 'return on investment' that is commonly understood by funders and investors.

> *An SROI analysis goes beyond merely measuring the financial aspects of social impact.*

It creates opportunities for dialogue with stakeholders to help them assess whether the activities are meeting their needs and expectations. The discussion serves to construct a broader narrative of qualitative and quantitative changes experienced by stakeholders. The SROI study helps to identify which stakeholders are affected, how they are affected and where they have created the most value, which, in turn, guides the development of an organisation to benefit individuals and the wider society.

Principles of SROI

Involve stakeholders: Interview stakeholders who have benefited directly from the programmes.

Understand what changes: Look for the changes that stakeholders have experienced after the programmes came into effect – keeping in mind both positive and negative impacts as well as intended and unintended consequences.

Value the things that matter: In calculating the SROI ratio, mainly including the benefits that have been stated directly by stakeholders.

Only include what is material: Look at the information collected and include only information and evidence that provides a realistic and genuine picture of the programme; reasonable conclusions can accordingly be drawn about their impact.

Do not over-claim: Despite having limitless indirect benefits, such as improving the well-being of other community members, this report limits the scope and stays conservative in its claims.

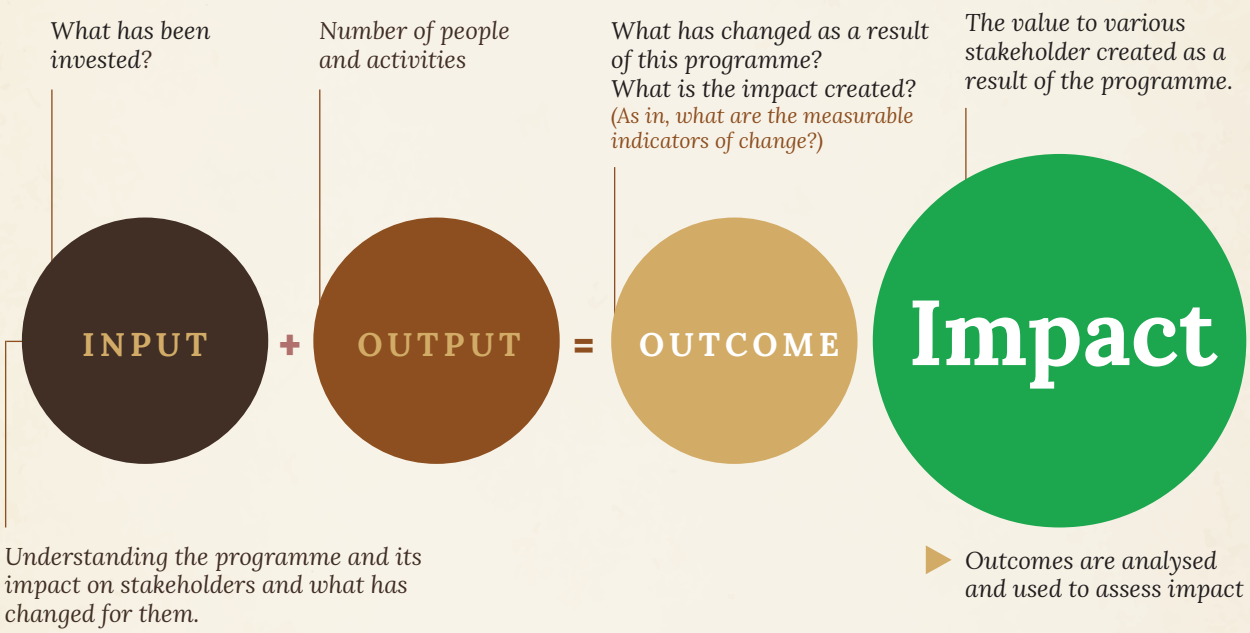
Be transparent: Demonstrate the basis of the analysis and the study limitations.

Verify the result: Discuss and verify with a 3rd party expert.

SROI Framework

The SROI framework used for this assessment has been formalised by Social Value International. At its core, SROI is a measurement valuing both the financial and non-financial outcomes of social interventions. There are four main elements that guide how social value is measured: inputs, outputs, outcomes and impact. They are detailed below:

SOCIAL VALUE INTERNATIONAL



The process that guides the SROI methodology is as follows:

1. *Mapping out the key stakeholders of the programme*
2. *Identifying how RF BIJ used resources to deliver activities*
3. *Addressing how these activities resulted in outcomes for the target audience*
4. *Evidencing outcomes and elected values based on stakeholder feedback*
5. *Assessing the impact and the extent to which the activities have contributed to this impact*
6. *Calculating the SROI value by adding benefits, subtracting negatives and comparing the result to the investment.*

Impact Calculation Process

The first step to calculating the social impact created by the programme involves understanding the number of people that experienced the change, i.e. establish the quantity of change. To calculate the quantity of change, specific questions were considered for evaluation. The survey's questions were mapped to the leading indicators of change.

Furthermore, all indicators of change are assigned monetary values or financial proxies.

Financial Proxies

To value non-financial change in financial terms, we use financial proxies or proxies with values determined by the beneficiaries themselves. For this, non-market items are assigned monetary value to capture the amount of social value created by the programme. Financial proxies primarily refer to the outcomes of the programme to estimate the stakeholder's perspective on the specific and contextual social return. Financial proxies can come from the following sources:

Primary Source	*This approach allows key stakeholders and experts to assign monetary values through an exercise (called 'choice modelling') that identifies values and importance based on the stakeholders' revealed preferences.*
Secondary Source	*Financial proxies can be sourced through secondary sources/reports available online and adjusted for inflation and country value. This approach is used when access to direct beneficiaries is not possible.*

For this evaluation, most of the financial proxies were sourced directly from the stakeholders using choice modelling.

Choice Modelling Exercise during RF Data Collection

Choice Modelling

Choice modelling values reveal the stated preferences made specifically for the programme's social indicators. Choice modelling is considered the best way to measure social value created, according to Social Value International. It is also one of the most suitable methods to estimate the willingness to pay. This technique is considered the most accurate by Social Value International as it is obtained directly from the beneficiaries.

For this evaluation, investigators observed these following steps:

1. *Each product and impact indicator card (a card containing the respective indicators) were explained to the participants. Researchers included only the cards of those products which were valuable to, and experienced by all of the participants.*

2. *The participants arranged the product cards in order, beginning with the product of highest social value/importance at the top and ending with the product of lowest social value/importance at the end of the sequence*

3. *Participants are asked to compare the value of a sentiment/impact/change with the value of a product in their lives to provide context and a broader understanding of their sense of value regarding the change.*

Sustainable Square team conducting valuation exercise at RF BIJ location

Accounting for Externalities

The final step involves accounting for externalities (Annex 6). Given that it is imperative to acknowledge the external influences that have impacted programme beneficiaries, the external impact should be estimated and removed from the calculation. The following criteria provides a way of estimating the following:

Deadweight is a measure of the amount of outcome that would have happened even if the activity had not taken place.

What probably would have happened in any case, if the project had not taken place?

Displacement is another component of impact and is an assessment of how much of the outcome displaced other outcomes.

Did any outcomes displace some other influence or impact?

Attribution is an assessment of how much of the outcome was caused by other *organizations or people's contributions.*

Who else was responsible for the social impact changes?

Drop-off is only calculated for outcomes that last more than one year

What is the future likelihood of participants abandoning the practices or influence?

Establishing impact by accounting for externalities is vital as it reduces the risk of overclaiming, ensuring that the conclusion is credible. It is by accounting for all of these factors that a true sense of the impact the programme has provided to its stakeholders can be obtained. Otherwise, there is the risk of investing in initiatives that don't work as intended.

Evaluation Objectives

The main objectives of the SROI evaluation study are as follows:

- *To measure the social, environmental and economic outcomes created by the various rural development initiatives under RF BIJ and represent the level of change using monetary values.*
- *Meaningfully include stakeholders to incorporate them into programme design as well as encourage them to undertake certain levels of ownership towards the programmes.*
- *Provide recommendations to strengthen programme delivery, undertake course correcting actions and maximise impact.*

Sampling

Multi-stage sampling was adopted to identify the states and clusters for the SROI evaluation, meaning all states where RF BIJ operates were taken into consideration. Inclusion of all states was necessary to understand regional differences in programme implementation and impact. The state of Tamil Nadu was excluded from the study due to operational and logistical constraints.

RF BIJ States	*The sample for the final engagement takes into consideration all states where RF BIJ operates**
Selection of Sample Clusters from each State	*The sample clusters were selected from every state**
Selection of Sample Households from each Sample Cluster	*Sample households were selected from sample clusters in each state***

**with the exception of Tamil Nadu, which was excluded due to operational and logistical challenges*
*** 99% confidence level; 5% margin of error*

RF BIJ's year of initiation guided the criteria for the selection of clusters for this evaluation, as it would allow the research team to understand and analyse aspects such as the growth of the programme and subsequent changes to their SROI value through the years. Clusters were shortlisted from each state. The clusters were also selected in alignment with the intervention type and implementation modality. As such, it was ensured that the sample clusters for the study had a representation of as many key interventions and activities organised by RF BIJ. Implementation modality focused on whether the tasks were one-time initiatives, a long-term activity and implemented at an individual or a community level. Lastly, the total number of households that were to be represented in the sample size was in proportion to the population of the states and their clusters (see Annex 2).

Convenience sampling was used to include respondents for the SROI evaluation, and they were selected based on their availability, level of participation and involvement in the programme's activities. Respondents contacted included the RF BIJ implementation team, key informants of the programme, household members, farmers and female members of SHGs, ensuring the inclusion of the programme's beneficiaries related to key programme interventions from each cluster. Counterfactual engagements in each village were also organised and the random selection of participants was made with the aid of the RF BIJ team. For counterfactual engagement, the selected villages were those that had similar conditions to RF BIJ intervention villages but where the RF BIJ programme had not intervened. Their proximity to RF BIJ intervention villages were also taken into consideration.

Table 3: Sampling Overview

Unit of Sampling	Sample Universe	Sample Size *(Estimated)*	Sample Size *(Achieved)*
States	12*	11	11
Clusters	27	19	19
Villages	560	71	71
Households	68,792	690	859
Farmers transacting through FPOs each year	43,387	190	260
WTGs/SHG members	15,000	190	138*

** WTGs were not either set-up or active in some clusters due to which women were not interviewed for the WTG questionnaire in those clusters.*

**Karaikudi (Tamil Nadu) was exempted from the sample due to logistical and operational reasons.*

Data Collection Process

The data collection process for this evaluation adopted a two-time engagement with the stakeholders - an initial stakeholder engagement with a select group of respondents was conducted to understand the different stages of the interventions, before engaging with a larger group of sample stakeholders.

Engagement Overview

Phase 1: *Initial Engagement*	**Phase 2**: *Final Engagement*
Aim: *To Understand What Changed*	**Aim**: *Understand How Much Changed*
Mode of Data Collection: *Direct interviews with selected stakeholders*	**Mode of Data Collection**: *Direct interviews with a large group of sample stakeholders*

Initial Stakeholder Engagement *(Qualitative Engagement)*

The initial stakeholder engagements were conducted in the three aggregate clusters of Netrang, Yavatmal and Kamareddy. They were planned so that the research team could understand the different stages of RF BIJ interventions. The following objectives were kept as the basis for this engagement:

- *Identification of appropriate stakeholders for the assessment*
- *Assessing programme outcomes and relevant stakeholder priorities*
- *Provide a feedback and monitoring mechanism to ensure that the project would achieve its intended consequences*
- *Provide meaningful access to dialogue between stakeholders and the implementation team*

Sustainable Square Team conducting engagements with beneficiaries at Yavatmal, MH.

The research tools used for the initial stakeholder engagement included:

- **In-depth Interview (IDI):** *IDIs were conducted with the cluster teams to get insights into the programme in the above locations and to gain a general understanding of the others.*
- **Focus Group Discussion (FGD):** *Organised FGDs involving approximately 140 beneficiaries in three clusters during the initial engagement. These FGDs aimed to yield sufficient information about the beneficiaries' socio-economic conditions and the impact RF BIJ has had on their lives.*
- **HH Visits:** *Visits to beneficiaries' homes and intervention sites in the three clusters were also conducted by the research team.*
- **Counterfactual test and design:** *Lastly, investigators did counterfactual engagements in villages with similar conditions where RF BIJ has not intervened, to compare their situation with RF BIJ intervention sites.*

Final Stakeholder Engagement *(Quantitative Engagement)*

The initial stakeholder engagement provided the research team with the information needed to plan the next stages of the evaluation process. This included developing impact indicators and the relevant research tools. While the research design was ready by April 2020; the national lockdown due to the pandemic delayed the final stakeholder engagement phase of the study. A pilot telephonic survey was conducted with stakeholders from Maharashtra to assess the possibility of doing the last engagement survey remotely. However, test results determined that this method would be insufficient for the assessment of an extensive, long-duration programme.

Phase 1	Phase 2
4th to 24th Sept 2020	4th to 30th Oct 2020
8 Clusters *Madhya Pradesh, Rajasthan, Odisha, Jharkhand and Uttarakhand*	**11 Clusters** *Telangana, Karnataka, Andhra Pradesh, Gujarat, Chhattisgarh and Maharashtra.*

Thus, on-field engagements were scheduled once the lockdown rules and regulations began easing. They were organised in two phases: from the 4th to 24th September 2020 and 4th to 30th October 2020. The first phase covered 8 clusters in the states of Madhya Pradesh, Rajasthan, Odisha, Jharkhand and Uttarakhand, and the second phase covered the remaining 11 clusters in the states of Telangana, Karnataka, Andhra Pradesh, Gujarat, Chhattisgarh and Maharashtra. The team completed the two phases of data collection in 19 clusters chosen for the study by following the mandated Covid-19 protocols and state guidelines. The following stakeholders were identified for the final stakeholder engagement.

They were identified as key programme beneficiaries:

- ***Household Members part of VAs***
- ***Farmer Members who transact with FPOs***
- ***Female Members of SHGs***
- ***RF BIJ Programme Implementation Team***

Please refer to Annex 3 for the study limitations and mitigation strategy.

Research Tools

The final stakeholder engagement phase for the SROI evaluation used a mix of quantitative and qualitative research tools. The following were used to gather information and data for this evaluation:

1. **Direct Surveys:** *Direct Surveys were administered to the primary programme beneficiaries, i.e. the household members representing VAs, farmers members transacting with FPOs and the female members of the WTGs. The survey questionnaires for each stakeholder type were prepared beforehand and administered using Atlan, a mobile data collection application. To ensure minimal language barriers, the survey questionnaires were translated into state-specific languages for the ease of the respondents.*
2. **Focus Group Discussion:** *FGDs were conducted to understand qualitative individual and village-level impact and were administered to select groups of the critical programme beneficiaries.*
3. **Choice Modelling:** *The Choice Modelling exercise was used to find out the value assigned by the beneficiaries to each of the impact indicators.*
4. **In-depth Interview:** *IDIs were conducted with a helping hand from each cluster's RF BIJ team to understand programme implementation modalities and cluster-specific details.*
5. **Semi-Structured Meetings:** *Semi-Structured Meetings were conducted for counterfactual engagements. Counterfactual engagements aimed to assess what would have happened to beneficiaries in the absence of the intervention. The engagements were done in villages that had socio-economic conditions akin to sample villages. A mini-group from such villages were surveyed using a specially designed questionnaire which accounted for the situation in their village.*

Data Collection with key programme beneficiaries

Data Analysis

The SROI evaluation of the RF BIJ programme was carried out based on the states where the sampled cluster belonged. The below list of states were evaluated along with the corresponding cluster for the study:

State	Cluster
Andhra Pradesh	*Adoni* *Rajam*
Chhattisgarh	*Rajnandgaon*
Gujarat	*Jasdan* *Modasa* *Netrang*
Jharkhand	*Deoghar*
Karnataka	*Bidar* *Gadag*
Madhya Pradesh	*Agar* *Jamai* *Mandla*
Maharashtra	*Gangakhed* *Yavatmal*
Odisha	*Balangir*
Rajasthan	*Jamwa Ramgargh* *Sawai Madhopur*
Telangana	*Kamareddy*
Uttarakhand	*Uttarkashi*

Impact Performance Indicators

Impact Performance Indicators aid in understanding the extent to which an intervention is producing expected changes. RF BIJ programme's impact is assessed against the following indicators of change developed for each stakeholder type, as follows:

Households under Village Associations

Indicators of Change	*Details*
Increase in community ownership	*Active community participation, engagement and mobilisation at all levels of programme implementation has created a sense of community ownership for the RF BIJ programme. It has also resulted in improving the personal wellbeing of beneficiaries as they reported improvements in their soft skills such as; communication, confidence, positivity, etc.*
Increase in access to social security measures	*With the help of RF team, villagers have started accessing the government's social security measures. It has, in turn, strengthened the support network of the beneficiaries.*
Increase in practices to ensure ecological balance	*Awareness sessions and training programmes have generated consciousness about the importance of keeping a healthy balance between environmental protection and livelihood needs. Beneficiaries have thus planted trees to increase forest cover and have reduced the dependence on chemical inputs for agriculture, which has helped in adopting the concept of 'Reliance Nutrition Garden'.*
Increase in sustainable agricultural practices	*Beneficiaries have started conserving water and reduced the use of fertilisers and pesticides to promote biodiversity. By introducing higher quality seeds and training the beneficiaries on the latest farming techniques, RF BIJ has helped to make agriculture more sustainable.*
Increase in access to water resources	*RF BIJ has been instrumental in ensuring water security in most of the villages. The increase in water security is supporting economic growth, environmental sustainability and disaster risk reduction in the villages. It has also resulted in gender equality as it either stopped or reduced the burden on female community members tasked with fetching water for household purposes - thus leading to better health for women.*
Reduction in illness	*Lack of clean drinking water and low intake of nutritious food once caused illnesses among beneficiaries, especially amongst women and children. Consumption of unsafe drinking water was another primary source of illness. Therefore, interventions like setting up RNG, providing access to quality water, etc. have reduced illness amongst beneficiaries.*
Improvement in economic status of HHs due to agriculture	*An increase in production because of improved efficiency in agricultural practices, access to training and information and a secure supply chain have increased the annual income of beneficiaries. Interventions like establishing RNG and providing training on agro-allied activities have also diversified their income sources, reducing the dependence on agriculture.*
Increase in household expenditure	*An increase in income has aided access to better education, healthcare facilities and improved the overall quality of life.*

Farmers associated with Farmer Producer Organizations

Indicators of Change	*Details*
Increase in satisfaction in the sale of agriculture produce	*Beneficiaries are more satisfied in selling their agricultural produce as setting up Farmer Producer Organizations has ensured better prices, timely payment for their products and eliminated intermediaries.*
Increase in satisfaction in the purchase of agricultural inputs	*Programme beneficiaries now have access to better agricultural inputs at a cheaper rate delivered (mostly) at their doorsteps. It has resulted in increased satisfaction while buying agricultural inputs.*

RF BIJ Programme beneficiaries

Women associated with SHGs or WTGs

Indicators of Change	*Details*
Increase in women's social empowerment via WTGs	*Ensuring dual membership in Village Associations has increased women's participation in decision making and programme implementation. This has led to an increase in the voice and agency of women, both inside and outside their homes. Additionally, the consumption of unsafe drinking water was a significant source of illness. Therefore, interventions like setting up RNG, providing access to quality water, etc. have drastically reduced illness amongst beneficiaries.*

Note: *Please refer to the Annex 5 for the initial list of Indicators of Change.*

Case

RF BIJ's support inspired Saradi ben to learn agriculture and fight for her inheritance rights

Saradi ben from Ghodbar village in Surat was left devastated when her husband died. Shortly after his passing, her only son tragically committed suicide, leaving Saradi ben to take care of his wife and two children. Having no property rights due to lack of documentation, Saradi ben could not access any government welfare schemes.

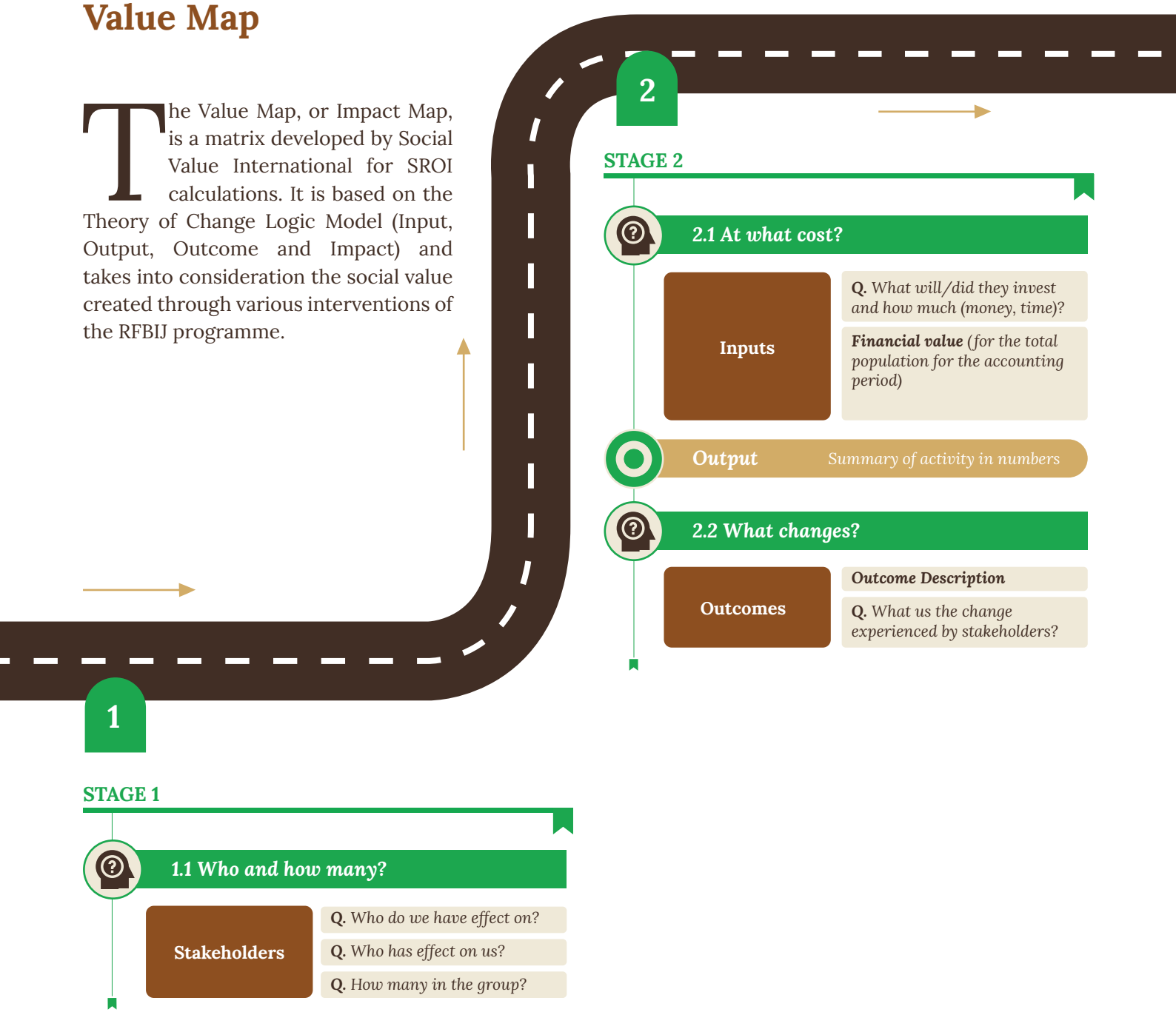
It was during these difficult times that Saradi ben came across RF's BIJ programme. RF BIJ helped her tend to her agricultural land by field levelling and deep ploughing, before constructing a farm pond. Her land's productivity went from 60kg to 4 quintals per year.

She is now able to harvest enough food for her family throughout the year and sell any surplus amounts. Gaining confidence from this achievement, she recently bought a pipe set to irrigate her land. Moreover, Saradi ben is now fighting for her inheritance rights with the help of RF BIJ.

Impact Performance

Introduction to the Value Map

The Value Map, or Impact Map, is a matrix developed by Social Value International for SROI calculations. It is based on the Theory of Change Logic Model (Input, Output, Outcome and Impact) and takes into consideration the social value created through various interventions of the RFBIJ programme.



3

4

STAGE 3

3.1 How much?

Indicator and source	***Indicators of Change*** **Q.** *Describe how you will measure the described outcome (including any sources used)*
Quantity	*Number of people experiencing the described outcome*

3.2 How long?

Duration of outcomes	**Q.** *How long (in years) does the outcome last for?*
Outcomes start	**Q.** *Does the outcome start in the period of activity or in the period after?*

Sum of duration and outcome start

3.3 How valuable?

Express the relative importance (value) of the outcome

Weighting	**Q.** *How important is this outcome to stakeholders? (e.g. on a scale of 1-10)*
Valuation approach *(monetary)*	**Q.** *Describe the monetary valuation approach used to express the relative importance (value) of each outcome*
Monetary Valuation	**Q.** *How important is the outcome to stakeholders (expressed in monetary terms)?*

(N.B. To make comparision between outcomes possible, your analysis should be consistent in the type of weighting used).

STAGE 4

4.1 How much caused by the activity?

Deadweight %	*Q. What will happen/ what would have happened without the activity?*
Displacement %	*Q. What activity would/did you displace?*
Attribution %	*Q. Who else contributed to the change?*
Drop off %	*Q. Does the outcome drop off in the future years?*

4.2 Still Material?

Impact Calculation	*No. of people (quantity) times value, less deadweight, displaement and attribution.*

CALCULATING SOCIAL RETURN

Discount rate: 6%
"Year 0 to Year 7"

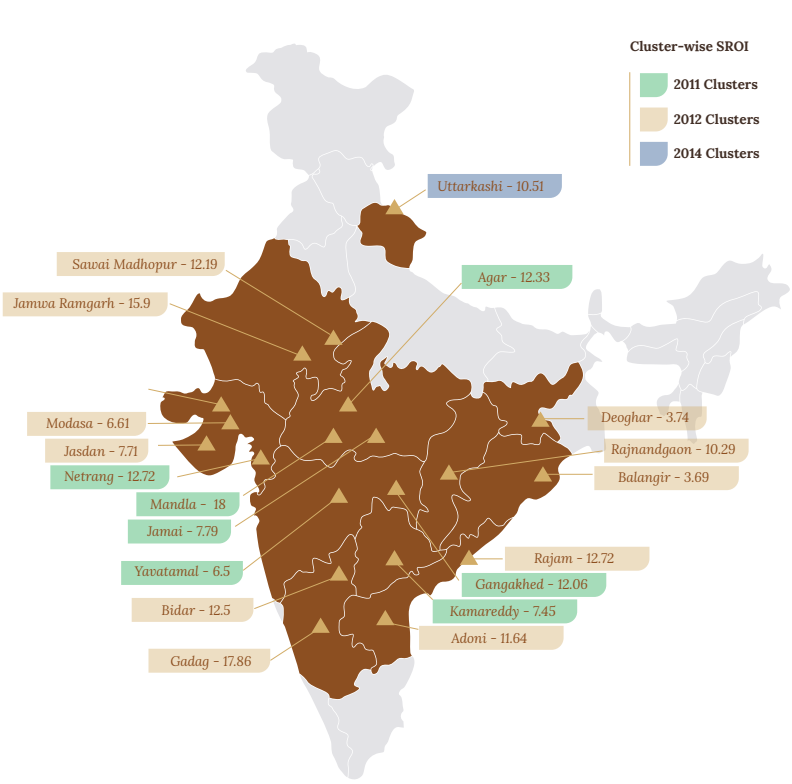
Overall Impact

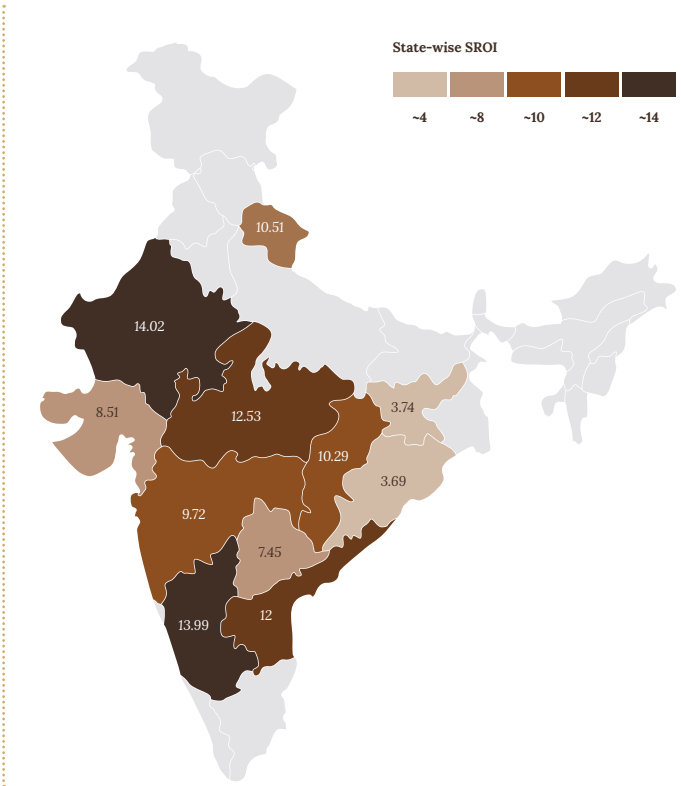
The total social value created by the RF BIJ programme in the 19 clusters is ₹4,710 crore. The total amount invested in the programme takes into account:

1. ***The amount invested by RF***
2. ***Money leveraged from the Government***
3. ***Money cost of labour*** *(the financial value of time spent by the stakeholders on the programme doing manual labour, attending training, meetings and exposure visits for the programme.)*

The discount rate in the impact maps was valued at 6% which is a standard rate used by Indian industries for social investment given the changes in the Indian economy. In addition, the duration of SROI calculation was extended for two additional years to account for the duration of the programme.

RFBIJ Locations





The SROI ratio of the programme ranges from 1: 9.11 to 1:10.93 with 1: 10.66 being the most likely SROI ratio. This means that for every ₹1 invested into the programme, there is a stakeholder return of over ₹10.66.

Compared to non SROI impact performance studies, this evidence-based, outcome-driven approach seeks to assess impact in a standardised and comparable way while recognising that context plays a critical role

in shaping the interpretation of an investments' impact results, including outputs and outcomes.

In time, standardised methodologies move RF BIJ closer to the ratings, benchmarks and other critical resources that will drive rural development. Impact assessment of RF BIJ via SROI will encourage a virtuous cycle of better impact investing results. By demonstrating RF BIJ's impact relative to its peers and to the scale of the world's problems, RF aims to lead advocacy to raise collective expectations for all types of developmental investing.

The SROI values provide a stakeholder value of the RF BIJ programme, which is different in each of the intervention clusters. This variation in the SROI values of the intervention clusters stems from the combined effect of the forthcoming datasets in each intervention cluster, based on:

1. ***Valuation of impact indicators by the stakeholders (financial proxies)***
2. ***The total amount invested in the programme (input cost)***
3. ***The number of stakeholders who experienced the changes (quantities of change) and***
4. ***External factors (externalities)***

The questionnaire designed for this study effectively covered all the data sets mentioned above, which makes the study precise by providing supporting field observations for the impact analysis.

The state-wise angle of the social impact created by the programme is investigated in the following section.

Refer to Annex 1 for cluster-wise social value created. The clusters are divided into three sections as per their year of initiation.

Social Value Created

₹ 4710 Cr

Input Cost*

₹441.87 Cr

** not adjusted to present day value*

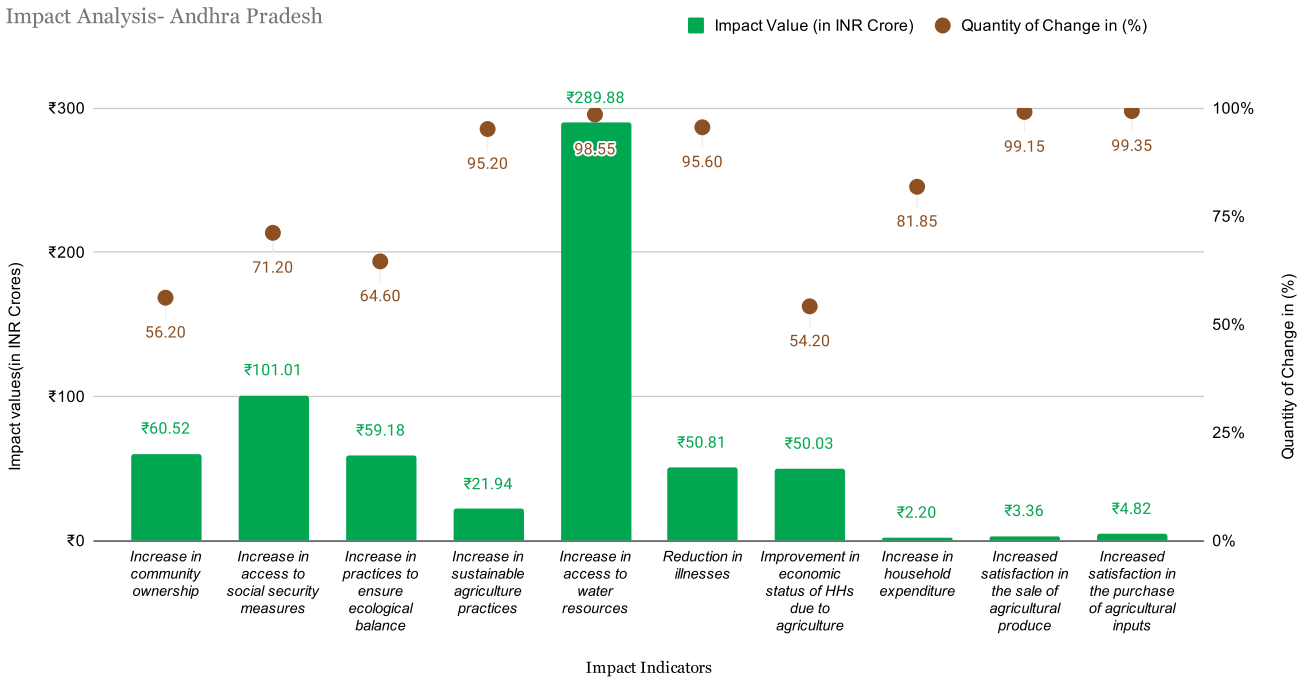
SROI Ratio

1 : 10.66

For every **₹ 1** *invested into the programme, there is a return to the stakeholders of over* **₹ 10.66** *each.*

State-wise SROI

Andhra Pradesh



Input Cost	**₹ 56.33 Cr**
Total Present value	**₹ 644 Cr**
SROI	**1:12**

The two clusters of Adoni and Rajam were evaluated for Andhra Pradesh state and the SROI value for Andhra Pradesh is 1: 12. RF BIJ initiated programmatic activities in 2012 for both clusters. The top three impact values denoted by beneficiaries were towards the increase in access to water resources, increase in access to social security measures and an increase in community ownership.

Increase in access to water resources

RF BIJ beneficiaries in the two Andhra Pradesh clusters valued increase in access to water resources as the highest (₹289.88 crore). All beneficiaries feel that they have started saving time on fetching water due to RF BIJ interventions, with the majority (93%) spending less than 15 minutes. These changes were experienced by 98.55% of the population in the two clusters.

Increase in access to social security measures

Access to social security measures had the second-highest impact value of ₹101.01 crore and was experienced by 71.20% of the population.

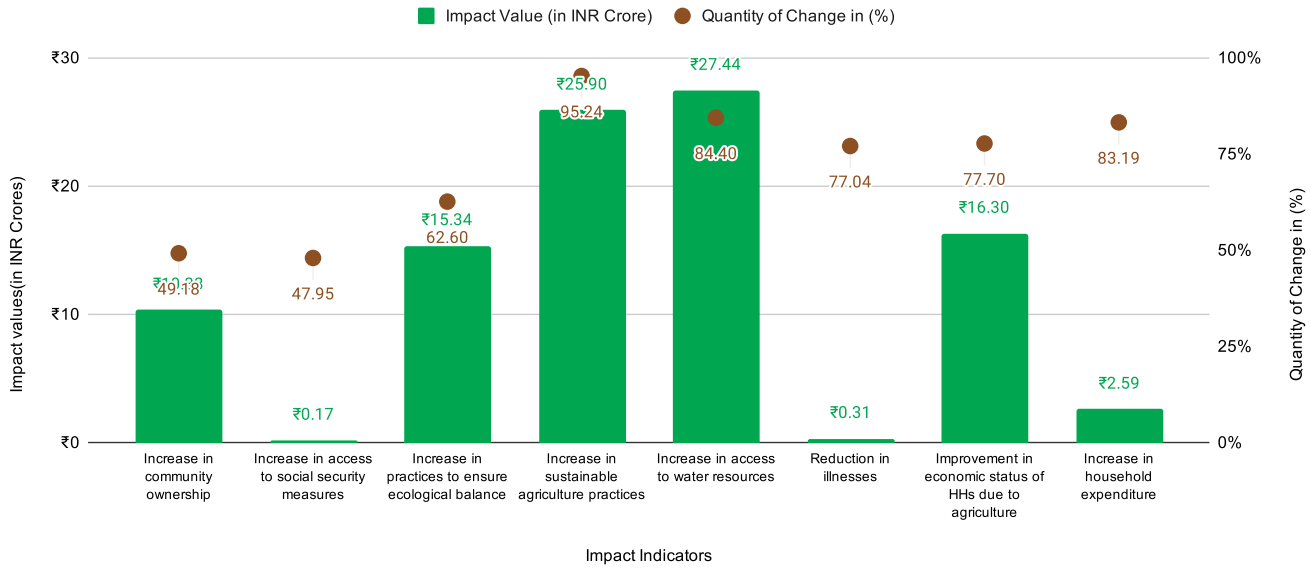
Increase in community ownership

Increase in community ownership was the third-highest valued impact indicator (₹ 60.52 crore) and experienced by 56.20% of the total population. Majority of the respondents (90%) from Adoni and Rajam clusters stated that they are very actively participating and regularly attend their village association meetings. Not only do they feel happy and supported with these associations, but they have also experienced an improvement in their interpersonal skills such as being more optimistic (96%), more motivated to accomplish their goals (84%), better communication skills (83%) and an increase in sense of responsibility (71%). They completely credit the increase in community ownership to RF BIJ efforts and have valued the same ₹60.52 crore.

Further, while an extremely high proportion of RF BIJ beneficiaries have experienced an ***increase in the satisfaction in the sale of agricultural produce (99.15%) and purchase of agricultural inputs (99.35%)*** via FPOs, they have valued it significantly lower at ₹3.36 crore and ₹4.82 crore respectively. This is because while they credit RF BIJ interventions for setting-up of FPOs in their clusters to make agricultural transactions more efficient, external stakeholders such as the government and other NGOs have equally contributed in making the process of the sale of agricultural produce and purchase of agricultural inputs more efficient for the farmers.

Chhattisgarh

Impact Analysis- Chhattisgarh



Input Cost	₹ 9.56 Cr
Total Present value	₹ 98.36 Cr
SROI	1:10.29

Beneficiaries of Rajnandgaon cluster were evaluated for Chhattisgarh state and the SROI value for Chattisgarh is 1:10.29. The top three impact values denoted by beneficiaries were towards the increase in access to water resources, increase in sustainable agriculture practices and improvement in the economic status of HHs due to agriculture.

Increase in access to water resources

Water is an increasingly expensive resource in rural agrarian regions such as Rajnandgaon, Chattisgarh. As a result, RF BIJ beneficiaries valued increase in access to water resources as the highest (₹27.44 crore). 84.40% of the population experienced the change.

Increase in sustainable agriculture practices

Training programs and capacity building sessions conducted by RF BIJ played an important role for the community members of Rajnandgaon, Chattisgarh to acquire new skills (92%) and inculcate them in their daily practices. These activities have helped in improving soil fertility since they reduced their usage of chemical fertilizers and pesticides (96%) and increased the usage of manure and de-silted sands (94%) that in turn reduced agricultural costs (96%). The maximum proportion of community members experienced this change (95.24%) and this impact indicator created an impact value of ₹25.90 crore.

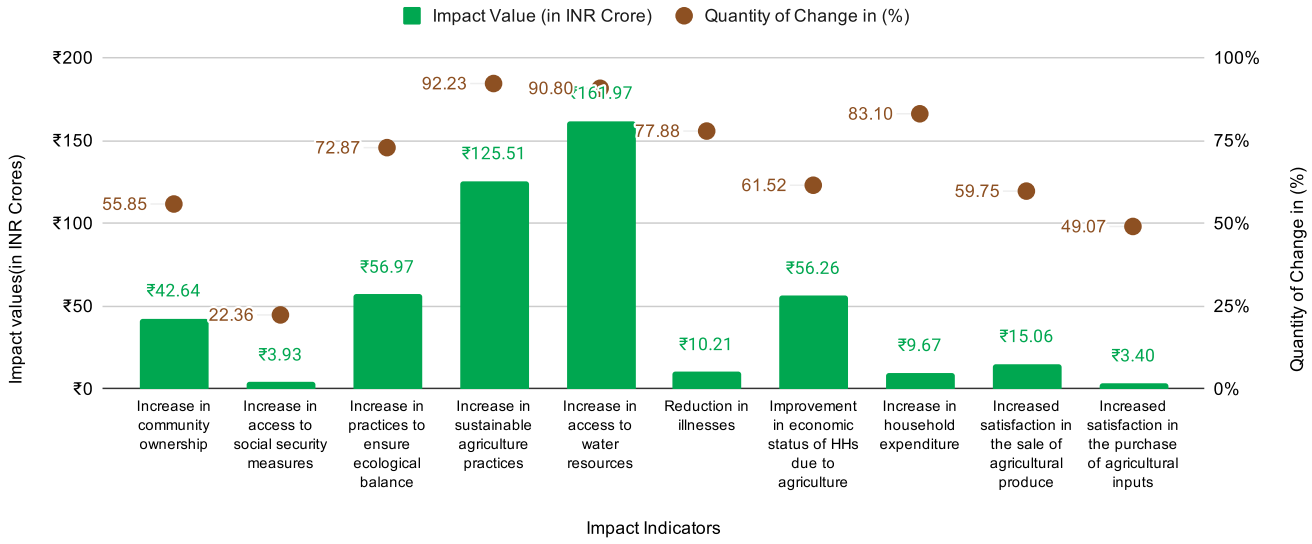
Improvement in the economic status of HHs due to agriculture

While a lesser proportion of community members from Rajnandgaon, Chattisgarh used to migrate for work before RF BIJ intervention, this dropped even further post their intervention where the beneficiaries either completely stopped or migrated for a period of 1 to 3 months. This is because their income increased due to more crop cultivation. Few beneficiaries even started new business activities. Beneficiaries also experienced a debt reduction (47%) after becoming a VA member. Reduction in rural distress and migration experienced by beneficiaries were primarily due to RF BIJ. Consequently, this impact indicator created a social value of 16.30 crore and was experienced by 77.70% of the population.

Less than half of the population experienced an ***increase in community ownership (49.18%) and an increase in access to social security measures (47.95%)*** in Rajnandgaon. This is because the cluster does not have well-established or well functioning FPO and WTGs/SHGs. Moreover, while community members have admitted to regularly attending bi-weekly village association meetings, it has not resulted in better interpersonal skills. Quantitative data indicate that 71% lack motivation, 66% lack positivity, 55% are yet unwilling to take risks, 62% have zero participation in decision making and 76% are unaware of community mobilisation techniques. Additionally, fewer community members have experienced access to social security measures due to government efforts and the presence of other organisations such as Surya Foundation.

Gujarat

Impact Analysis- Gujarat



Input Cost	**₹ 57.03 Cr**
Total Present value	**₹ 485.62 Cr**
SROI	**1:8.51**

Three clusters of Netrang, Modasa and Jasdan were evaluated for Gujarat state and the SROI value for Gujarat is 1:8.51. RF BIJ initiated programmatic activities in Netrang in 2011, and subsequently for Modasa and Jasdan in 2012. The top three impact values denoted by beneficiaries in the three Gujarat clusters were towards an increase in access to water resources, increase in sustainable agricultural practices and increase in practices to ensure ecological balance.

Increase in access to water resources

RF BIJ beneficiaries in Gujarat valued increase in access to water resources as the highest (₹161.97 crore). In Jasdan, beneficiaries who were previously rain-dependent for agriculture are now experiencing an increased water availability due to the construction of check dams and deepening of existing ponds. It has resulted in crops being grown in both Kharif and Rabi seasons. Moreover, increased water availability is being used judiciously by community members who have moved from water-intensive cotton crops to lesser water-intensive and profitable products such as groundnuts. This, in turn, has brought significant benefits to agri-allied activities as well. For instance, given that groundnut stems are highly nutritious for livestock, their daily milk production has gone up from 600 to 5000 litres a day in a Somalpur village, Jasdan. Overall, the increase in access to water resources was experienced by 90.80% of the population.

Increase in sustainable agriculture practices

RF BIJ's Gujarat beneficiaries valued increase in sustainable agricultural practices at ₹125.51 crore and 92. 23% of the population stated to have experienced change within this impact indicator. Beneficiaries feel that they have acquired new skills after attending training sessions by RF BIJ and have inculcated better agricultural practices such as mixed cropping (93%) and use of more natural inputs such as manure, de-silted soil and natural pest management (99%). However, only 51% of the beneficiaries stated that they presently practice the new methods that they learnt during RF BIJ training sessions.

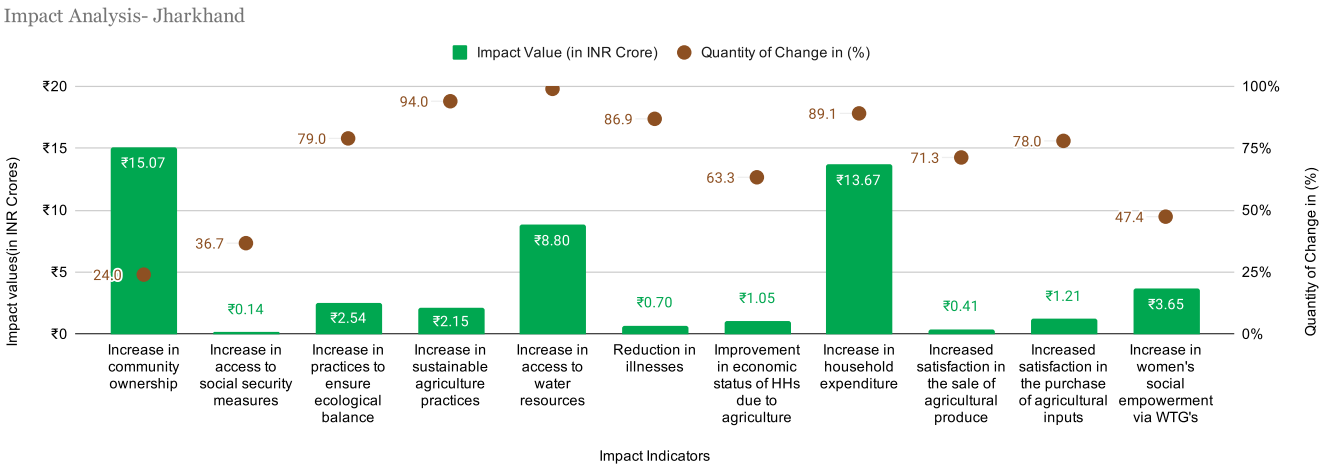
Increase in practices to ensure ecological balance

RF BIJ's Gujarat beneficiaries valued increase in practices to ensure ecological balance at ₹56.97 crore and 72.87% of the population stated to have experienced a change in regards to this impact indicator. While an overwhelming majority (99%) of the beneficiaries stated that their land has become more fertile and more productive (due to adoption of better agricultural practices) and they have increased the number of crops cultivated, the use of biogas is yet low (40%) among community members.

Impact indicator such as an ***increase in access to social security measures*** was valued low at ₹3.93 crore and experienced by only 22.36% of the population. A very less proportion of respondents (11%) stated that RF BIJ helped them in accessing any government schemes.

A higher proportion of RF BIJ beneficiaries in Jasdan than Modasa and Netrang have experienced an ***increase in the satisfaction in the sale of agricultural produce and purchase of agricultural inputs.*** Jasdan beneficiaries stated that they receive timely payment and better price for their produce while eliminating the role of middlemen. Beneficiaries also mentioned that they were able to save on significant expenses involved in selling produce at the Agricultural Produce Market Committee (APMC).

Jharkhand



Input Cost	**₹ 13.19 Cr**
Total Present value	**₹ 49.38 Cr**
SROI	**1:3.74**

Beneficiaries of Deoghar cluster were evaluated for Jharkhand state and the SROI value for Jharkhand is 1:3.74.

The SROI value in Deoghar is close to Balangir and is the second-lowest. The cluster could not generate a high return for "access to social security measures, reduction in illness, increased satisfaction in the sale of agricultural produce and purchase of agricultural inputs". Furthermore, unlike many other clusters, Deoghar already had a fair amount of rainfall, which is reflected in the value created for "increased access to water resources" as it is significantly low compared with other clusters. Although an increase in community ownership is one of the highest valued indicators, the effect is dropping off as 61% of the respondents say either the village association is "present but inactive" or "I rarely attend their meetings".

The top three impact values denoted by beneficiaries were towards an increase in community ownership, increase in household expenditure and an increase in access to water resource.

Increase in community ownership

Although an increase in community ownership was the highest valued impact indicator at ₹15.07 crore, it was significantly experienced by a lesser percentage of the population at 24%. This is because while community members attended bi-weekly meetings, more than half of the respondents (51%) felt that the Village Associations is inactive in their village. Likewise, they see no improvement in their interpersonal skills and stated that they lacked the desire to accomplish goals (82%), lacked responsibility (69%), lacked positivity (84%), lacked faith in themselves (65%), have a fear of failure (98%) don't participate in decision making (90%) and lack the ability to mobilise people (96%).

Increase in household expenditure

Increase in household expenditure was the second-highest valued indicator at ₹13.67 crore and experienced by 89.1% of the population. Beneficiaries stated that they have been able to spend money on their children's education (90%),

purchased vehicles for personal use (69%) and bought clothes for their family whenever needed (92%) since they have seen an increase in their personal income. All beneficiaries credited various RF BIJ interventions for this change.

Increase in access to water resources

Deoghar beneficiaries have assigned an impact value of ₹8.80 crore to increase in access to water resources and these changes were experienced by 99% of the population. Creation of water harvesting structures in the villages has directly enhanced their livelihood as beneficiaries reported growing crops 2 to 3 times in a year. This has also resulted in a 50% increase in food security in their villages.

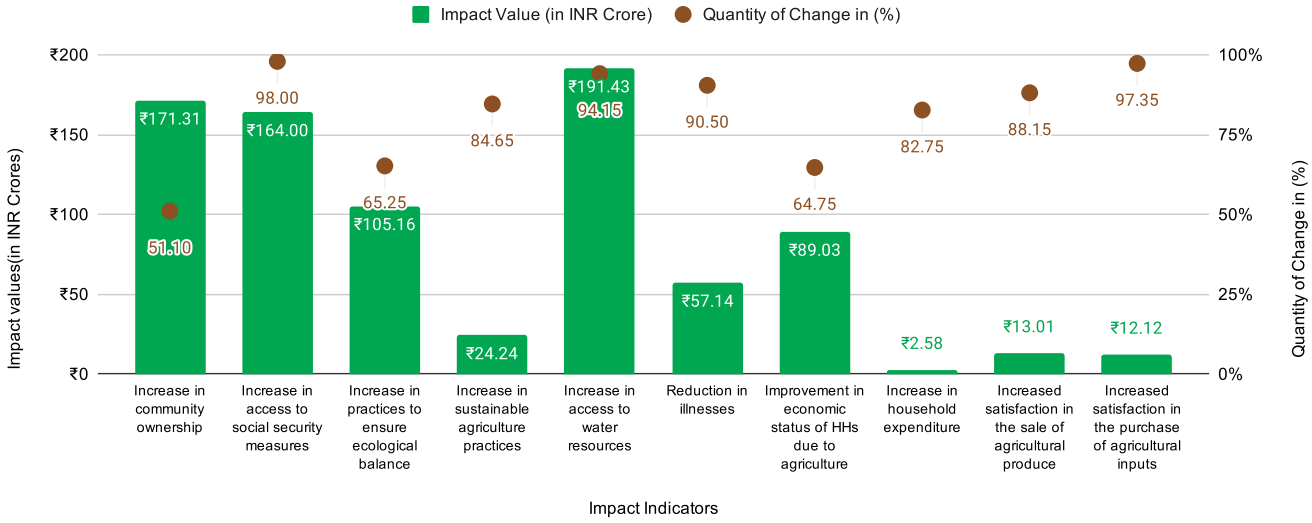
Increase in practices to ensure ecological balance *(₹2.54 crore) and an* ***increase in sustainable agriculture practices*** *(₹2.15 crore) have been valued by the beneficiaries almost equally. RF BIJ's strong focus on promoting sustainability in agriculture by discouraging unsustainable methods such as borewells and encouraging usage of organic inputs have enhanced the livelihood of households in the cluster as their cultivation costs have gone down.*

Increase in women's social empowerment via WTGs

Increase in women's social empowerment via WTGs *was valued at ₹3.65 crore and experienced by 47.4% of the population. While all (100%) women community members of Deoghar credited RF BIJ for setting up SHGs in their village, 69% stated that they were able to fulfil their aims post joining the SHG. Women members of the SHG state that they have experienced an increase in their personal and social well-being (69%), increase in confidence (56%) and an increase in employment opportunities (38%) post joining the SHG in their village. However, employment opportunities for women members are largely restricted to undergoing vocation training (56%), as very few members have taken up income generation activities with the help of SHGs (13%). Nevertheless, few women in the Deoghar cluster have found employment with the help of their SHG (31%) and are contributing to their household income. 56% of women members also believe that there has been a positive change in their community perspective towards women's rights because of the activities of the SHGs.*

Karnataka

Impact Analysis- Karnataka



Input Cost	**₹ 59.32 Cr**
Total Present value	**₹ 830 Cr**
SROI	**1:13.99**

The two clusters of Gadag and Bidar were evaluated for Karnataka state and the SROI value for Karnataka is 1:13.99. RF BIJ initiated programmatic activities in 2012 for both clusters. The top three impact values denoted by beneficiaries were towards an increase in access to water resources, increase in community ownership and an increase in access to social security measures.

Increase in access to water resources

Increase in access to water resources is valued the highest at ₹191.43 crore and experienced by 94.15% of the population. RF BIJ's Karnataka beneficiaries credit RF BIJ and the government for the creation and maintenance of water structures in their villages.

Increase in community ownership

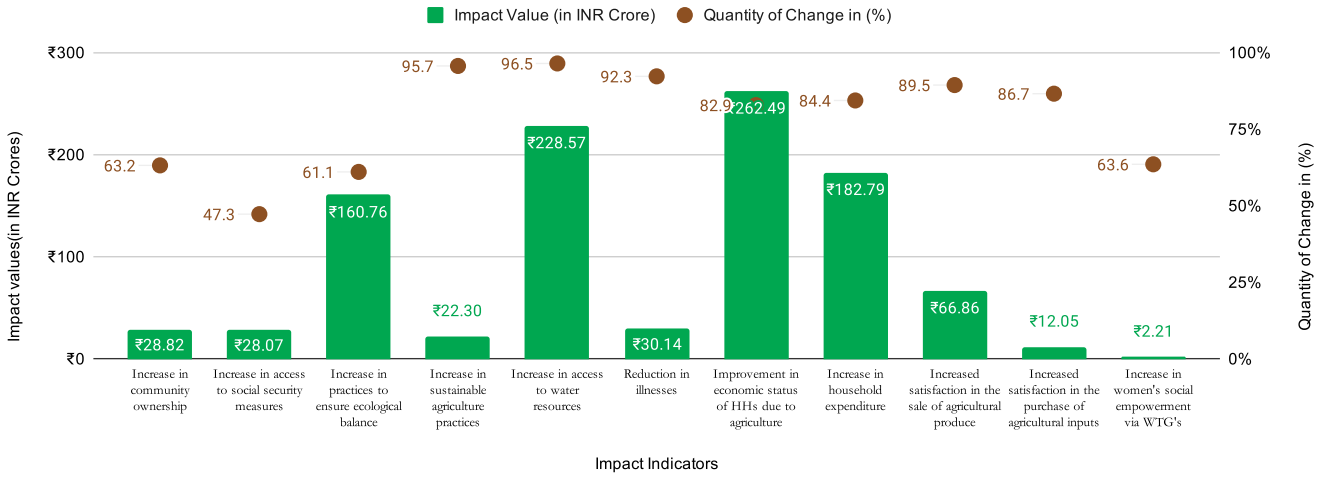
Although the increase in community ownership was the second-highest valued impact indicator at ₹171.31 crore, it was experienced by a lesser proportion of the population at 51%. This is because although Village Associations are active in their villages, members still face challenges in areas such as minimal participation in decision making (74%), ability to mobilize community members (81%) and low risk-taking (89%) because of fear of failure. However, they have performed well in improving interpersonal skills of members such as improved communication skills (99%), motivation (96%), and a positive attitude (84%).

Increase in access to social security measures

Given that community members, especially of Gadag, have had a history of being neglected from government benefits, they valued access to social security measures at ₹164.00 crore. Moreover, these changes were experienced by 98% of the population in the two clusters. Beneficiaries credit this change to RF BIJ interventions and 97% stated resulted in an increase in their income.

Madhya Pradesh

Impact Analysis- Madhya Pradesh



Input Cost	**₹ 81.8 Cr**
Total Present value	**₹ 1025 Cr**
SROI	**1:12.53**

Agar, Jamai and Mandla (all initiated in 2011-12) clusters were assessed in the state of Madhya Pradesh. The combined SROI value for these clusters is 1:12.53 which is the third-highest amongst all the states. Improvement in the economic status of HHs due to agriculture, increased access to water resources and increase in household expenditure are the top three highest valued indicators in Madhya Pradesh

Improvement in the economic status of HHs due to agriculture

82.9% of the programme beneficiaries in Madhya Pradesh experience an improvement in their economic status due to agriculture and it is valued the highest at ₹262.49 crore. The significant increase in their income is attributed to the increased earning from agriculture and agri-allied activities like dairy farming. Previously 56% and 34% of the respondents migrated 1-3 months and 4-6 months in a year respectively, however, the notable improvement in their economic status has brought it down to 30% and 4% respectively. 14% of the beneficiaries did not have a bank account when RF BIJ was started, however, RF BIJ's financial inclusion activities resulted in all of them opening a bank account, paving the way for accessing cheaper credit.

Increase in access to water resources

Madhya Pradesh is a state with an acute water crisis, the initiatives centred around water harvesting have resulted in increased access to water resources. Water scarcity, also a prime reason for migration, has seen a major dip in the clusters as 92.3% of the beneficiaries report an increase in access to water resources and valuing that increase at ₹228.57 crore. The beneficiaries credited RF BIJ (83%) and government (17%) for this increase, making it one of the strongest intervention areas of the program in Madhya Pradesh.

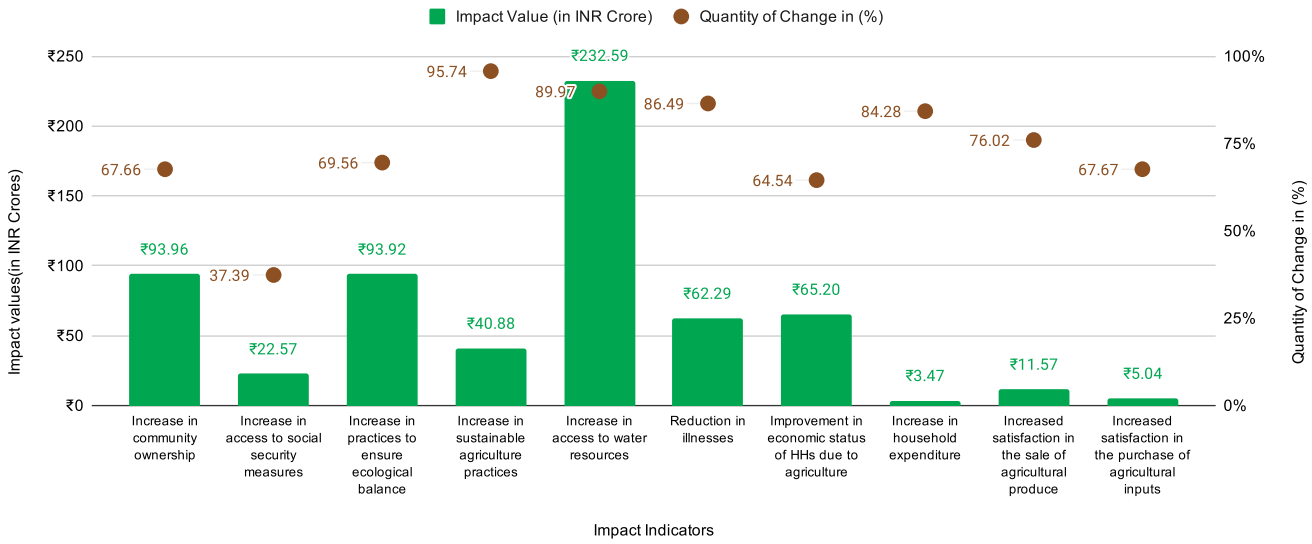
Increase in household expenditure

The improvement in the economic status of the HHs have positively impacted their spending capacity, making an increase in household expenditure as the third-highest valued indicator in Madhya Pradesh. 98% denote that the improvement in income has aided in spending more for their children's education, whereas 61% bought a vehicle for their personal or professional use after started earning more. The total social value created for the increase in household expenditure stands at ₹182.79 crore.

Despite 89.5% and 86.7% beneficiaries experiencing an increased satisfaction in the sale of agricultural produce and the purchase of agricultural inputs respectively, the social value created in comparison to these quantities of changes, is low, amounting to ₹66.86 and ₹12.05 crore. This could be because 30% is not satisfied with the payment speed and the same percentage feel that they are not saving any time by selling through FPO, which is why 58% is partly dependent on other traders for selling their produce.

Maharashtra

Impact Analysis- Maharashtra



Input Cost	**₹ 64.96 Cr**
Total Present value	**₹ 631 Cr**
SROI	**1:9.72**

The only two clusters in Maharashtra, Yavatmal and Gangakhed were evaluated to find out the SROI value of RF BIJ activities in these locations. Having invested ₹64.96 crore in Maharashtra so far, RF BIJ has created a social value of ₹631 crore resulting in an SROI value of 1:9.72. The beneficiaries valued interventions to **'increase access to water resources'**, **'increase in community ownership'**, and the interventions **'to increase ecological balance'** the highest, totalling a social value of ₹420.47 crore. However, Increase in sustainable agricultural practices was experienced the most by participants (95.74%), but the social value it created stood at ₹40.88 crore.

Increase in access to water resources

Yavatmal and Gangakhed is hit by a water crisis every summer, causing farmer suicides, especially in Yavatmal. Therefore, construction of water harvesting structures and deepening of earthen dams have significantly increased their access to water resources. valuing it the highest at ₹232.59 crore, more than 1/3rd of the total social value created. All benificiaries report an increase in the no. of crops produced due to an increase in water availability.

Increase in community ownership

86% of the respondents reported to have regularly attended bi-weekly meetings leading to an increased participation in community level activities. Due to the increased participation, especially in constructing water harvesting structures and pipe laying, increase in community ownership has been valued the second highest in the state, creating a social value of ₹93.96 crore. 88% of them not only credit it to RF's intervention, but also wants to continue to be an active member of the Village Associations set up by RF BIJ.

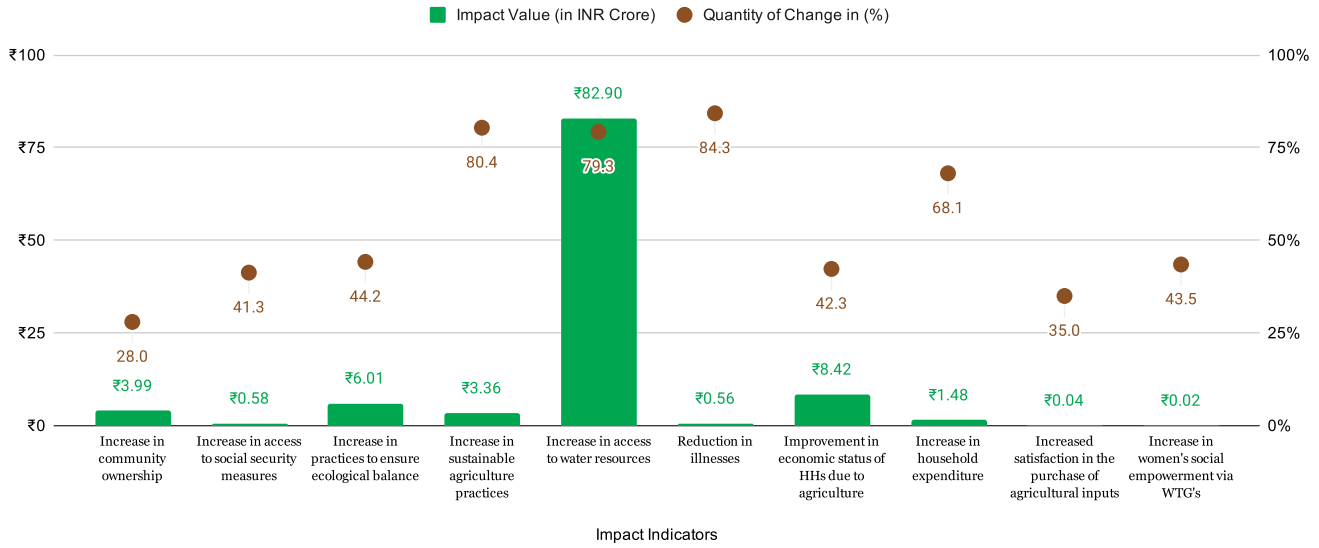
Increase in practices to ensure ecological balance

Reduction in the usage of chemical fertilizers, plantation of trees, and ensuring proper waste management has improved the ecological balance in these clusters. This led to them valuing this indicator the third highest at ₹93.92 crore just ₹4 lakhs below the second highest valued indicator. Moreover, 91% of the respondents denoted an increase in the ground water level from their neighbouring villages.

RF BIJ's intervention could however improve the impact around 'access to social security measures' by creating awareness about it and setting up a permanent method for knowledge sharing about these measures. Although 76.02% and 67.67% have experienced an increased satisfaction in the sale of agricultural produce and purchase of inputs respectively, it has not translated into a high social value as they don't feel a major value addition in their lives so far. It is clear as 68% still opt to sell through other traders.

Odisha

Impact Analysis- Odisha



Input Cost	**₹ 29.07 Cr**
Total Present value	**₹ 107 Cr**
SROI	**1:3.69**

Balangir was evaluated for Odisha and the SROI value for Odisha is 1:3.69. Although the social return per rupee invested in Balangir is satisfactory for such a large initiative, it is the lowest when compared with other clusters. Few reasons for this include, the Farmer Producer Organisation in Balangir has not been able to garner support from all the villages due to lack of trust and because of the presence of strong APMC. It can also be attributed to the relatively lower women participation in the program initiatives. Beneficiaries were also unable to access the government's social security measures which has reduced the value.

In the assessment of Balangir, **Increase in access to water resources** have been valued the highest, creating a social value of 82.90 crores (77% of the total social value created in the cluster). Water being a critical element for household and farming needs, the interventions to recharge groundwater level by setting up ring wells and constructing ponds have led to this high value. However both increase in sustainable agricultural practices (80.4%) and reduction in illness (84.3%) was experienced more than increase in access to water resources but their total social value created was below 4 crores.

Improvement in the economic status of HHs due to agriculture

42.3% of HH experienced an improvement in economic status of HHs due to agriculture creating the second highest social value of ₹8.42 crore. This change is reflected in their ability to spend more money for children's education (78%) and buy clothing whenever needed (89%). An astounding 96% credited this change to RF BIJ's activities.

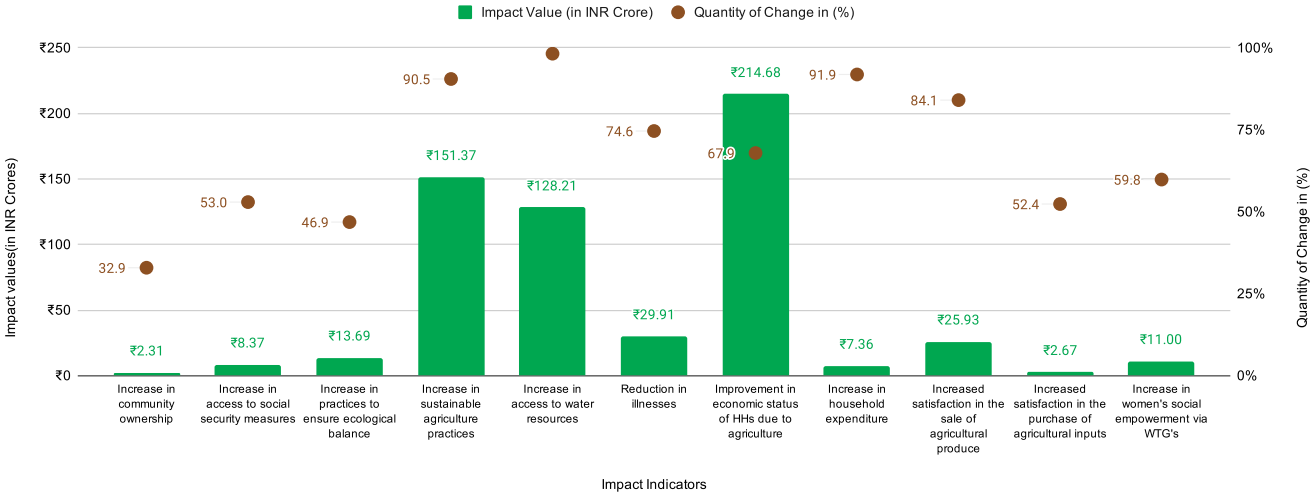
Increase in practices to ensure ecological balance

Amongst interventions carried out to increase ecological balance, 85% reported to have reduced the usage of chemical inputs for agriculture and 48% felt there's an increase in the ground water level in their villages due to judicious use of water resources. It is the third highest valued indicator creating a social value of ₹6.01 crore.

On the other hand, both increased satisfaction in the purchase of agricultural inputs and Increase in women's social empowerment were the least valued indicators. The quantity of change for the latter has also been observed to be lower particularly due to lack of entrepreneurial spirit (only 7% of the WTG members started their own business) and low social and personal wellbeing as only 7% reported 'improved relationship with family members', 'increase in educational opportunities' and 'spending more time for myself'.

Rajasthan

Impact Analysis- Rajasthan



Input Cost	**₹ 42.46 Cr**
Total Present value	**₹ 595 Cr**
SROI	**1:14.02**

The two clusters of Jamwa Ramgarh and Sawai Madhopur were evaluated for Rajasthan state and the SROI value for Rajasthan is 1:14.02. RF BIJ initiated programmatic activities in 2012 for both clusters. The top three impact values denoted by beneficiaries were towards improvement in the economic status of HHs due to agriculture, an increase in sustainable agricultural practices and increase in access to water resources.

Improvement in the economic status of HHs due to agriculture

While a lesser proportion (27%) of community members from the two Rajasthan clusters used to migrate for work before RF BIJ intervention, this dropped even further post their intervention wherein the beneficiaries completely stopped migration. This is because their income increased due to more crop cultivation (87%). Beneficiaries also started combining agricultural activities with other activities such as dairy (78%), poultry (74%) and horticulture (43%). Likewise, more than three fourth beneficiaries have experienced debt reduction (77%) after becoming a VA member. Beneficiaries credit reduction in rural distress primarily to RF BIJ. They valued this impact indicator at ₹214.68 crore and 67.9% of the population is estimated to have experienced this change.

Increase in access to water resources

Water in Rajasthan is considered to be a precious resource due to its lack of availability in the region. Increase in access to water resources is therefore one of the topmost valued impact indicators at ₹128.21 crore and experienced by 98.2% of the population. All beneficiaries from Rajasthan credit RF BIJ for the construction and maintenance of water structures in their villages.

Increase in sustainable agriculture practices

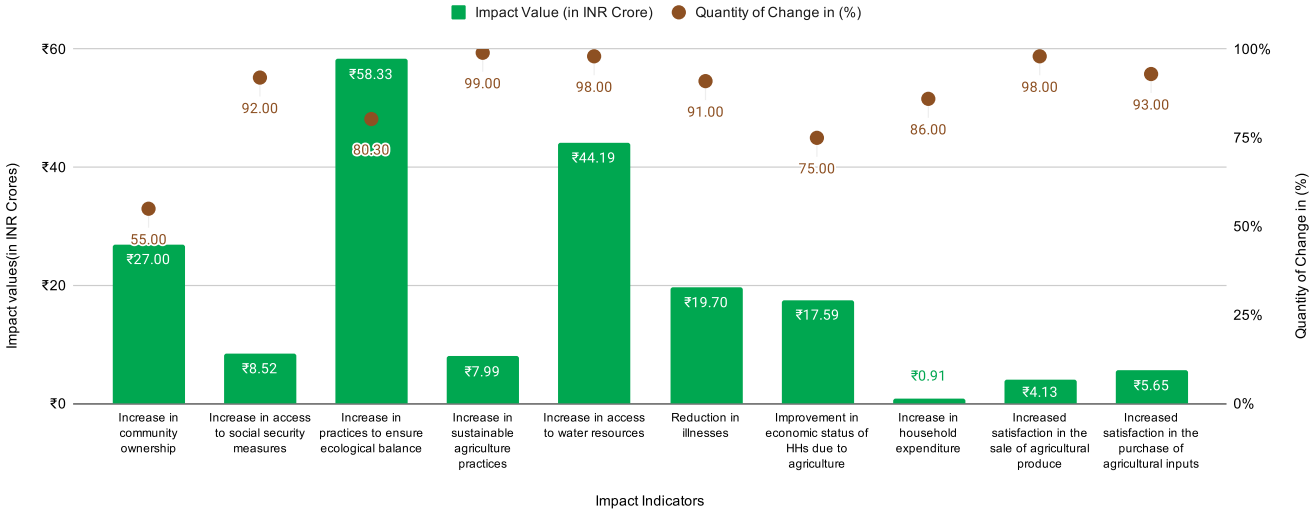
RF BIJ's Rajasthan beneficiaries valued increase in sustainable agricultural practices at ₹151.37 crore and 90.5% of the population stated to have experienced change within this impact indicator. Majority beneficiaries feel that they have acquired new skills after attending training sessions by RF BIJ. While all have begun using more natural inputs such as manure, de-silted soil and natural pest management (100%), about half (49%) have initiated mixed cropping as well. Moreover, 99% of the respondents stated that they are presently practising new methods learnt during RF BIJ training sessions.

Increase in women's social empowerment via WTGs

Increase in women's social empowerment via WTGs *was valued at ₹11.00 crore and experienced by more than half i.e. 59.8% of the population. All (100%) women community members of the two clusters credited RF BIJ for setting up SHGs in their village and a majority (79%) of them joined their SHG since they wanted to earn money to support their families. Women members of the SHG state that they have experienced an increase in their personal and social well-being (75%), increase in employment opportunities (54%) and an increase in their confidence level (50%) post joining their SHG. Likewise, members feel that employment opportunities for them have increased since not only have they undergone vocation training (58%), but members have also taken up income generation activities (38%) and gotten employment (79%) with the help of SHGs. 71% women members also believe that there has been a positive change in their community towards women's rights because of the activities of the SHGs.*

Telangana

Impact Analysis- Telangana



Input Cost	**₹ 26.05 Cr**
Total Present value	**₹ 194 Cr**
SROI	**1:7.45**

Beneficiaries of Kamareddy cluster were evaluated for Telangana state and the SROI value for Telangana is 1:7.45. The top three impact values denoted by beneficiaries were towards an increase in practices to ensure ecological balance, increase in access to water resources and increase in community ownership.

Increase in practices to ensure ecological balance

RF BIJ's Telangana beneficiaries valued increase in practices to ensure ecological balance at ₹58.33 crore and 80.30% of the population stated to have experienced a change in regards to this impact indicator. The majority (98%) of the beneficiaries stated that their soil health has improved due to a reduction in the usage of chemical fertilizers and pesticides. Additionally, all beneficiaries state that their groundwater levels have increased in the past few years. Adoption of water conservation methods such as rainwater harvesting and creation of farm ponds also contributed towards the same. However, the use of biogas is yet low (46%) among community members even though all recognise the benefits of using the same.

Increase in access to water resources

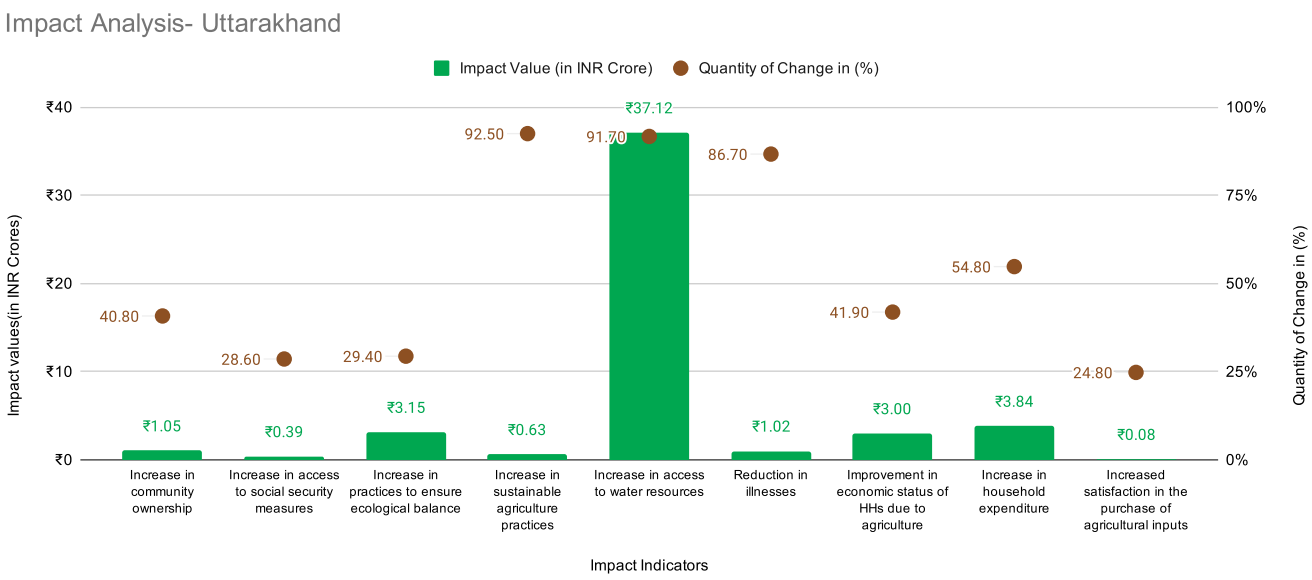
Increase in access to water resources is another top valued impact indicator at ₹44.19 crore and experienced by 98% of the population.

Increase in community ownership

Although the increase in community ownership was a valued impact indicator at ₹27.00 crore, it was experienced by a comparatively lesser proportion of the population at 55%. This is because although Village Associations are active in their villages, members still face challenges in areas such as minimal participation in decision making (61%), ability to mobilize community members (61%) and low risk-taking (57%) because of fear of failure. However, they have performed well in improving interpersonal skills of members such as improved communication skills (86%) and motivation (65%).

A higher proportion of the population in Kamareddy, Telangana have experienced an ***increase in the satisfaction in the sale of agricultural produce (98%) and the purchase of agricultural inputs (93%)***. While Kamareddy FPOs have created successful value chains for farmers' produce, the availability of other sources for buying agricultural inputs with 43% FPO members depending on the same has led to less valuation of the impact indicator "increased satisfaction in the purchase of agricultural inputs".

Uttarakhand



Input Cost	**₹ 4.78 Cr**
Total Present value	**₹ 50.27 Cr**
SROI	**1:10.51**

Beneficiaries of Uttarkashi cluster were evaluated for Uttarakhand state and the SROI value for Uttarakhand is 1:10.51. The top three impact values denoted by beneficiaries were towards increase in access to water resources, increase in household expenditure and increase in practices to ensure ecological balance.

Increase in access to water resources

Increase in access to water resources is the top most valued impact indicators at ₹37.12 crore and experienced by 91.70% of the population. RF BIJ's Uttarkashi beneficiaries credit RF (64%) as well as government efforts (36%) for the creation and maintenance of water structures in their villages. More importantly, more than half (55%) of the beneficiaries feel that they have begun saving time due to the water structures created in their villages. Majority of them (96%) do not spend more than 15 minutes fetching water, whereas earlier, they spent at least an hour (87%) of their time for this activity.

Increase in household expenditure

Increase in household expenditure was the second highest valued indicator at ₹3.84 crore and experienced by 54.80% of the population. Beneficiaries stated that they have been able to spend money on their children's education (79%) and bought clothes for their family (76%) since they have seen an increase in their personal income. A small proportion of beneficiaries have also purchased vehicle for personal use (10%). They have primarily credited various RF BIJ interventions (93%) for this change, along with the efforts of the government (5%) and other organisations (2%) working in the cluster.

Increase in practices to ensure ecological balance

RF BIJ's Uttarakhand beneficiaries valued increase in practices to ensure ecological balance at ₹3.15 crore. However, only 29.40% of the population stated to have experienced change in regards to this impact indicator. Majority (95%) of the beneficiaries stated that their land has become more fertile and their productivity has likewise increased. However, beneficiaries could not estimate whether there has been an increase or decrease to their groundwater levels.

RF BIJ's Observed Impact

Development of Community-Led Small Scale Irrigation Facilities

1. ***Modernise irrigation systems:*** *Across RF BIJ operation regions, stakeholders attribute the construction and maintenance of the water structures for irrigation and other purposes in their village to RF interventions.*

2. ***Improve agricultural and other water supply systems:*** *RF BIJ not only worked on the access to drinking water through its interventions, but also brought awareness among stakeholders on the importance of drinking boiled water, which households believe is a major contributing factor in reducing waterborne illnesses like diarrhoea, malaria and typhoid.*

3. ***Improve water collection methods:*** *Before RF BIJ interventions, beneficiaries used to spend 30-120 minutes a day fetching water from nearby water bodies. With the help of better water supply systems, villagers reduced the time spent to bring water to less than 30 minutes a day. This led to increased productivity in households.*

4. ***Improve water governance, make institutions adaptive and capable of cross-sectoral coordination:*** *Involvement of government institutions was less prevalent in irrigation system related activities. RF BIJ promoted community-led management of installed irrigation infrastructures - the most effective way to restore and govern scarce natural resources. The challenge for RF BIJ is to identify what governance of natural resources would imply for future eco-restoration concerns, as many regions showcased a significant reduction in the availability of groundwater in RF BIJ regions.*

Case

Community efforts reduced the burden faced by women to collect water.

Khateshwar is a rural village in Yavatmal district of Maharashtra. Up until 2016, the women in Khateshwar had to walk for 2-3 hours every day to fetch water for their household activities. Alleviating this chore was an important priority when RF-BIJ set up a Village Association in Khateshwar.

Upon seeing the will of the VA members to address this issue, a villager stepped in to share his well, situated 1 km away from the village. Inspired by this, RF BIJ sponsored the cost of the pipeline, and other VA members agreed to contribute labour to the effort.

In a matter of two months, these working groups laid the pipeline designed to deliver safe water to 130 households. This saved over 1,000 hours spent fetching water, freeing up the productivity of the women of Khateshwar. The villager's credit RF BIJ for building a sense of community among the village members via its institution-building activities.

Institution Building and Social Empowerment

1. ***Establishing project facilitation teams to implement village-level impact:*** *Households under VA give 100% credit to RF BIJ's field team for the formation and day-to-day functioning of community-led institutions. RF BIJ team members followed structured process in forming VAs, providing knowledge regarding their responsibilities, training and following up to make sure all members attend meetings regularly across RF BIJ intervention regions.*

2. ***Mobilising communities through participatory methods to identify beneficiaries and help them organise VAs & FPOs:***

   The primary changes in households under VAs experienced through RF BIJ are:

   - *Increased household income*
   - *Gained knowledge and skill set to implement agricultural best practices.*
   - *Increased sense of community and worked towards solving common problems*
   - *Improved standard of living*

   VA members believe that without RF, this change seems impossible.

   WTG members experienced individual empowerment and were instrumental in evolving their village's sentiment around women's rights. Evidence for the same is viewed in the increased investment in the education of young girls through WTG gathered funds and government loans.

3. ***Facilitating community institutions for supporting the formation of Farmer Producer Organizations***

   VA Members: *Households from all RF BIJ intervention clusters experienced an increase in income subsequent to improved agriculture practices, area treatment, water harvesting initiatives, household vegetable cultivation through Reliance Nutrition Gardens (RNGs).*

   FPO: *RF BIJ helped members receive immediate payments and proof of purchase while selling or handing over the product to FPO. Before FPOs, members used to sell their produce to local traders and received lower prices. Members are motivated to sell their crops through FPO due to better prices, on-time payment. FPO members experience Improvement in earnings and savings and decrease in annual debt by ₹1 lakh.*

   WTG: *Top three experiences women had after being part of WTGs are: Increase in personal and social well being, increase in employment opportunities, increase in confidence. A large number of female members received income from self employment, which helped them to increase their financial contribution towards their household.*

4. ***Capacity building of community institutions:***

Community institutions notably had high attendance in capacity building activities. VA and FPO members have attended the training programmes conducted by RF.

The major skills gained by household members under VAs are communication, more ownership or initiation, decision making, risk-taking, and community mobilisation.

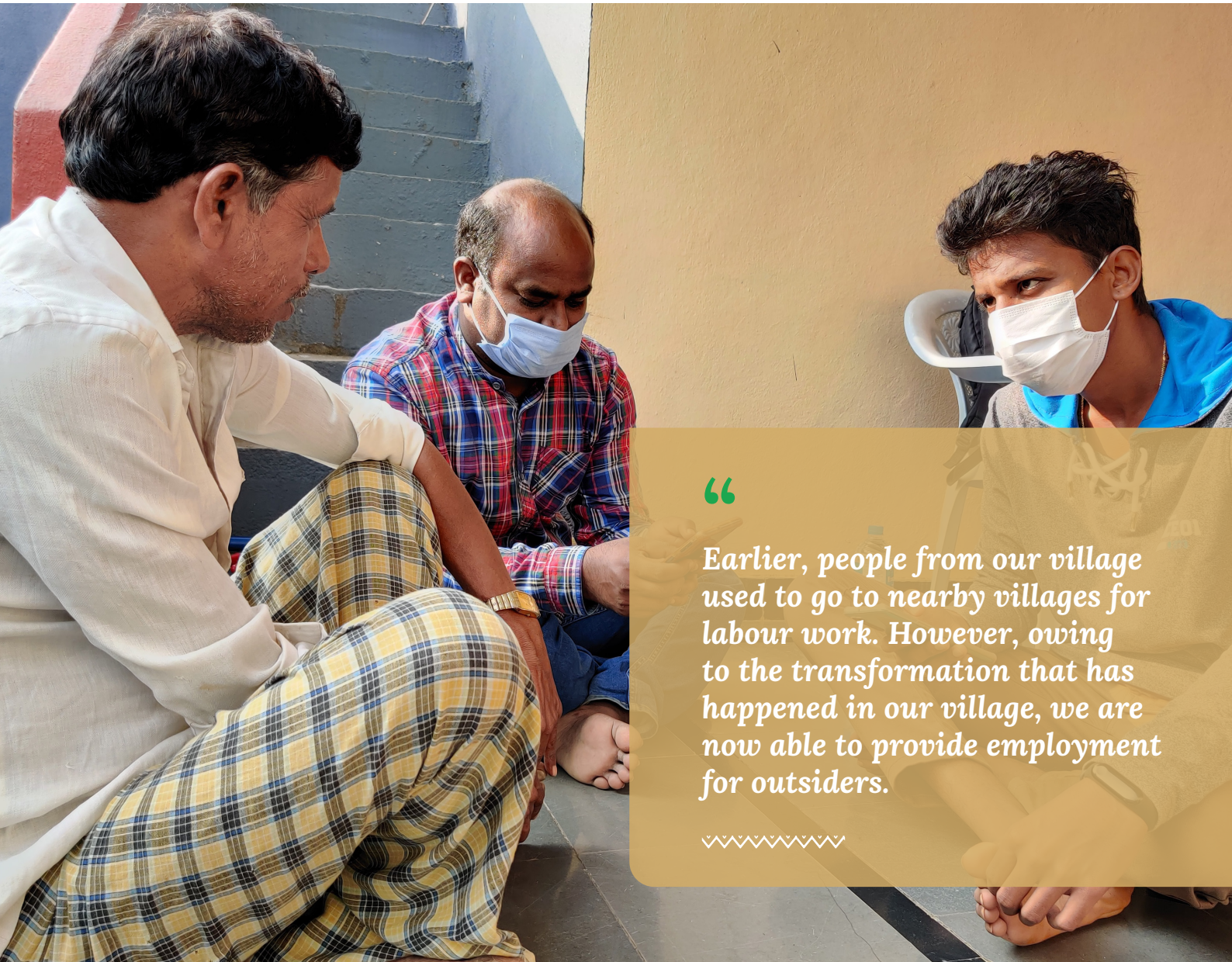
The most notable change women from households have experienced through RF BIJ activities has been female empowerment. The top three contributing factors they consider to be; regular saving habits, regular involvement through meetings and active support of female members.

Community Investment Support

To ensure availability and accessibility to credit for developmental activities in villages:

1. *Increase in social security via availing financial support through government schemes to help VA member households. Village Development Funds (VDF) play an instrumental role in gathering capital during festivals and alternative situations of financial need. Female VA members are now capable of performing banking operations, which includes; depositing and withdrawing money.*

2. *Partnership development through engaging sector support organisations for facilitating links to commercial bank financing: WTGs and VA members have taken up commercial banking activities, but it's challenging for them to gather loans or capital for everyday investment purposes like facility/procurement centre.*



> ***"Earlier, people from our village used to go to nearby villages for labour work. However, owing to the transformation that has happened in our village, we are now able to provide employment for outsiders.***

Food and Nutrition Security Initiatives

Households from all RF BIJ intervention clusters experienced an increase in income subsequent to improved agriculture practices, area treatment, water harvesting initiatives, household vegetable cultivation through Reliance Nutrition Gardens (RNGs).

1. ***Ensure household food production:*** *Turning wastelands into productive lands and implementing latest farming techniques have ensured food security in the villages with increased farm production. The research team also witnessed acceptance towards adopting RNG. Except for a few technical issues due to lack of availability of circular plots for Nutrition Gardens, villagers largely appreciate Nutrition Gardens. This innovative solution ensures food security, and an alternative way to generate extra income.*

2. ***Improve nutritional standards of low-income rural households?*** *From reduction in the number of sick days taken to increased inclusion of fruits and vegetables, RNGs helped households to consume nutritious food, and any excess was distributed to neighbours or sold. RNGs fulfilled the nutritional requirement of beneficiary families. In states like Odisha with high rates of malnutrition, maintaining RNG helps women to feed their families with nutritious food without incurring any additional costs.*

Case

A sense of community inspired Deepak to take leadership roles for his village's welfare

Hailing from a small village in Jasdan, Solanki Deepak always struggled with public speaking. Despite having a Bachelor's degree, he would hesitate to engage and partake actively in village meetings.

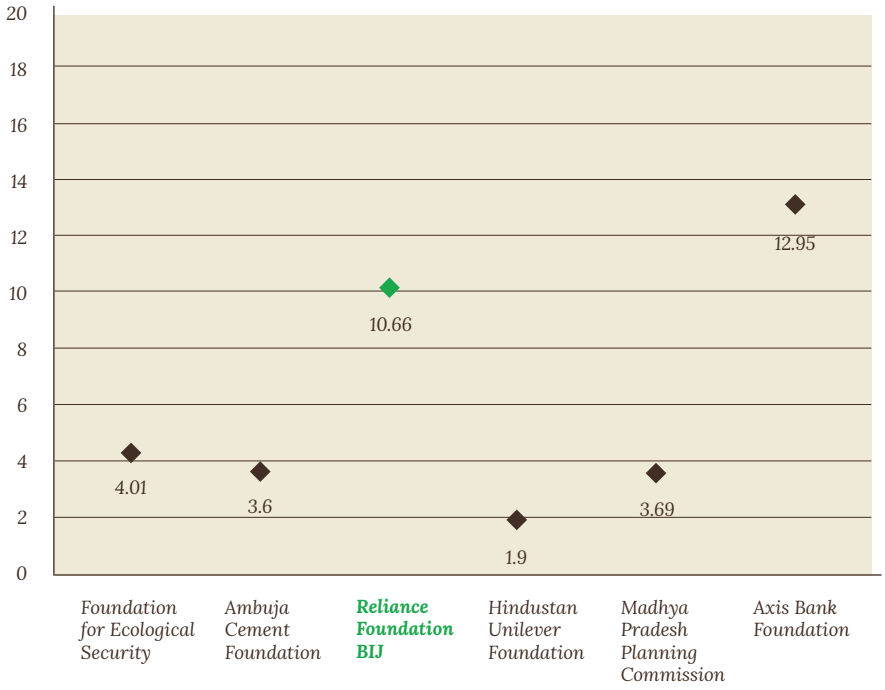
To overcome his introversion, he participated in a leadership training programme conducted by the RF BIJ team under the institution-building intervention in his village. As time passed, he grew confident and began participating in discussions surrounding the village activities. Moreover, when the local school was left with only three teachers, he, along with two other volunteers, came forward to teach the pupils for a month. To support the future of the children in their community, the trio filed multiple petitions to the government to fill the vacant position. In protest of the government's rejection to comply, the teachers conducted a strike. Two days after the boycott, the government agreed to fill the post.

Deepak credits his newfound leadership ability to RF BIJ's training programme, as it helped him overcome his self-doubt and gave him the skills to speak freely and effectively. Today, he loves engaging in village-level affairs and working for the overall betterment of his community.

Benchmarking Analysis

This evaluation has focused on undertaking a benchmarking analysis in order to understand the performance of the RFBIJ programme in contrast with national and international organisations. As mentioned in the Overall Impact Section, the SROI ratio of the programme is 1:10.66.

In comparison with national organisations, it was found that the SROI ratio for similar programmes ranged from an average of 1:1.9 to 1:12.95.



Hindustan Unilever Foundation (HUF)'s CSR initiative Prabhat aims at providing holistic solutions to improve the lifestyle of communities in its areas of operation. The initiative offers employable vocational training to youth and women, in order to address the nationwide shortage of employable workforce and support the Government of India's mission towards a 'Skilled India'. Consequently, the programme's key outcomes focus on personal development, career development and societal benefits for its beneficiaries. The SROI evaluation study focused on a single intervention location for the period of November 2014 untill March 2016. The total inputs calculated were ₹40,26,800. The Intervention Program generated **1:1.9** in social value.

Hindustan Unilever Limited

Ambuja Cement Foundation's (ACF) Water Resource Management (WRM) programme works towards water conservation and water availability by collaborating with various state governments, local NGOs and academic institutions. Some of these interventions include integrating water harvesting structures, encouraging crop diversity and agri-partnerships and community education to share technical knowledge and technologies. The SROI study, conducted in 2016, focused on two locations in Rabriyawas, Rajasthan and Kodinar, Gujarat and created social value of **1:5.26** and **1:13.03**, with an input of ₹14,75,61,956 and ₹10,90,43,480 in Rabriyawas and Kodinar respectively.

Ambuja Cement ~ FOUNDATION ~

Madhya Pradesh State Planning Commission's The Tejaswini Project aims to enable socially and economically behind women make use of choices, spaces and opportunities in the economic, social and political spheres for their improved wellbeing via SHGs. The project has four components; namely, grassroots institution building, micro-finance services, livelihood and enterprise development, female empowerment and social equity. The programme, implemented in Madhya Pradesh, generated a social value of **1:3.69**.

The Communities Programme works towards creating sustainable livelihoods through the **Axis Bank Foundation** (ABF) programmes and leveraging their geographical spread to undertake 'shared value' projects. ABF creates sustainable livelihoods by adopting a holistic approach, enabling and enhancing rural ecosystems for income generation activities through self-sustaining models. These interventions include enhancing water conservation, security and access, improving agricultural practices and off-farm activities such as goat rearing, poultry, horticulture and encouraging female empowerment through SHGs. This is achieved by providing institutional finance, promoting Farmer Federations to provide collective bargaining power to farmers and better market linkages. This supports rural livelihood by broadening the skillsets of marginalised and tribal youth, and enhancing employment opportunities for differently-abled individuals. The SROI evaluation for ABF was conducted in 2016. The total investment by ABF was ₹18,71,00,000 and the programme generated **1:12.95** in social value.

The **Foundation for Ecological Security** (FES) has initiated a programme on Water Commons to improve the management and governance of land and water resources, strengthening community stewardship in more than 800 habitations across eight districts in the states of Andhra Pradesh, Karnataka, Madhya Pradesh, Maharashtra and Rajasthan. FES achieves this objective primarily by creating a common understanding of water, particularly groundwater as a shared resource. It has also channelised MGNREGA for land and water rejuvenation and aligned the rights to employment with the right to resources. Lastly, it supports farmers in adopting low external input and water-saving practices to increase their crop productivity. This SROI study for FES was conducted in 2016-2017. The SROI value created for all four years (2013-2017), was **1:2.55** while for 2016-2017 alone was **1:4.01**.

International Benchmarking	
Organisation	**SROI Ratio**
Dompet Dhuafa	1:3.13
Swedish University of Agricultural Sciences	1:26
Reliance Foundation BIJ	1:10.66
Australian AID	1:6
Angels of Impact	1:2.95
Restore the Earth Foundation	1:32.99

Based in Indonesia, **Nazava** engages local female leaders to address social problems faced by locals, such as the disproportionate burden faced by women to provide safe drinking water for families, the high costs of obtaining safe drinking water and water-borne diseases. It addresses these issues by providing safe and affordable household water treatment. On the input of USD 165,168.09, the enterprise generated an outcome of USD 486,446.51. The social value created was **1:2.95**.

A Swedish company, **Solvatten AB's** product Solvatten is a household water treatment unit that treats water containing viruses, parasites and bacteria using solar energy. With a lack of fresh and clean water in developing countries, Solvatten was distributed in the Bungoma district in western Kenya, with the help of the NGO SCC-ViAgroforestry. The units were installed in the region because many households had been affected by waterborne diseases. Eliminating waterborne diseases led to outcomes such as improved living standards, improved health, protection of the environment and more opportunities for income-generating activities. The SROI ratio for this programme in its five years was calculated to be **1:26**. Likewise, the total input for the programme was 316,200 KES, and the total present value of outcome was 8,180,946 KES.

The **Talensi Farmer-Managed Natural Regeneration** (FMNR) Project was a three-year collaboration between World Vision Australia and World Vision Ghana that aimed to rebuild household resilience among vulnerable communities in Talensi District, in the Upper East Region of Ghana. The project focused on nine communities in Talensi containing a population of approximately 12,000 people in 1,472 households. The programme aimed to reverse the deterioration of soil fertility and the natural resources by focusing on adoption of FMNR and complementary sustainable agriculture techniques. The study calculated that, after accounting for

discounting factors, World Vision's investment of funds, staff and technical input generated in the target communities had an SROI value of **1:6**. Thus, for World Vision investment of GH¢ 609,000, the programme created a total value of GH¢ 3,772,000.

The Al Ikhwan Co-Operative **Farmers Empowerment Programme** in Sukaraharja Village, Cibeber District of West Java focuses its efforts on empowering farmers in the village, reducing poverty, strengthening village assets and community capacity and increasing farm productivity. It does so by training villagers to become farmers with good farming practices, providing post-harvest management and paying attention to village development through social assistance initiatives. The programme, implemented in 2009, created a social value of. For the total Investment Dompet Dhuafa of Rp 1,282,030,000, the programme generated Rp 4,009,945,729.

Restore the Earth Foundation conducted a reforestation project in Tensas River National Wildlife Refuge (NWR) in the Mississippi Alluvial Valley. Restore the Earth Foundation works closely with public agencies and local experts to identify critical restoration projects in need of funding and utilises Agro-Ecological, its EcoMetrics model, to develop the business case for each restoration project based on its benefits and returns. The forecasted SROI analysis substantiates that for every dollar invested in reforestation in the Tensas River NWR by corporate sponsors, **1:32.99** in social value is returned to community stakeholders.

Recommendations

The below recommendations are based on field observations and the data collected to assist the project team in better decision making, by strengthening the existing processes or initiating new ones. They have been divided into categories to communicate the results and shed light on pillars of potential impact.

Increase in access to water resources

Data

Indicator marked with highest social value experienced by beneficiaries from all clusters, except Modasa and Sawai Madhopur

Rationale Via Impact

Impact via addressing the primary concern of water security:

1. *Energised MGNREGA*
2. *Ecological Restoration*
3. *Community-led Environmental Governance*
4. *Strengthened Livelihood*

Recommendations

With high social value, efforts towards improving water security should be continued by:

1. *Reinvigorating traditional institutional mechanisms around water*
2. *Help farmers to manage water-stressed environments*
3. *Promote community led governance of complex & scarce natural resources*

Increase in sustainable agriculture practices

Data

Consistent & high value (among top 4 valued indicators) among clusters, but a lower percentage of beneficiaries experienced change

Rationale Via Impact

Lower stakeholder experience is due to lack of continuation of sustainable practices.

*Sustainable farming practices can increase crop yields by 80% for small-scale farmers.**

*(GIIN: Understanding Impact Performance-Agriculture Investments Report 2020)

Recommendations

Encourage continuation of sustainable practices through incentives.
Example: Soil, water management, seed certifications via local/national associations

Increase in access to social security measures

Data

RFBIJ households valued it low, with a smaller percentage of the population experiencing change.

Rationale Via Impact

Service delivery mechanism of the government is broken often and is challenging to manage its inclusivity.

As a result, only a few VA members valued it highly, and it was experienced less often.

Recommendations

With the current influence built over time, RFBIJ can work with the government towards process re-engineering of government agricultural programmes to ensure service delivery timely and effectively with its inclusivity.

This effort will lead to:

1. *Strengthening of knowledge exchange*
2. *Capacity building across the government administration*
3. *Stakeholders' can easily access and avail from government welfare schemes*

Increase in economic status

Data

Indicator is valued high among all clusters, but the percentage of beneficiaries experiencing the same is less

Rationale Via Impact

Small holder farmers have been able to increase their productivity and income across RFBIJ clusters.

But, income generation possibilities are few for the vulnerable population, including women and the rural families without land.

Recommendations

Addressing the below needs can increase the percentage of RFBIJ beneficiaries experiencing positive change:

1. *Educate and promote the possibilities of farmers adopting Outgrower Schemes and Offtake Agreements.*
2. *Promoting women members to undergo QP (Qualification Pack) based skill training, with certifications on entrepreneurship in agriculture and allied sectors by collaborating with the Agriculture Skill Council of India (ASCI), to help lead to venture creation.*

Increase in community participation

Data

Even though the social value for community ownership is high, a lower percentage of VA members experience the same impact.

Reason:

1. *Lack of necessary life skills among beneficiaries required to build community ownership*
2. *Less youth involvement*

Rationale Via Impact

Community-led governance of natural resources seems to be the most effective way to restore and govern scarce natural resources, leading to better management of agricultural land through collective responsibility.

Recommendations

To address the requirement of strengthening community ownership:

1. *Initiate and strengthen community institutions*
2. *Strengthen training modules to develop life skills*
3. *Introduce Maturity Model to identify different phases and to track self governance of RFBIJ initiatives.*
4. *Strengthen livestock development and efforts to encourage households to take up fisheries (in community-owned water bodies) and non-timber forest products (NTFPs) to address vulnerability in the form of low levels of diversification and high rates of landlessness.*

Conclusion

Reliance Foundation's BIJ programme over the last ten years has worked on reducing rural distress and migration, investing to support smallholder farmers, encouraging sustainable agricultural practices amongst them and integrating value chains. BIJ interventions led rural households to build resilient and sustainable farms, generate employment and ultimately improve their productivity, income and sustainability. RF BIJ's SROI evaluation captured and provided an economic value to the impact created by the programme.

The programme's ratio of 1:10.66 is extremely positive as against the programmes working towards rural transformation, in both global and Indian context. The evaluation finds that few of the top impact indicators valued by beneficiaries across states and clusters were increase in access to water security, increase in practices to ensure ecological balance, increase in sustainable agricultural practices and increase in community ownership.

Increase in access to water resources has been most valued by beneficiaries throughout states and clusters showcasing the significance of effective utilization of resource and environmental conservation. This has also aided in increasing the number of crops cultivated by beneficiaries. Further, increasing forest cover, reducing dependency on chemical inputs for agriculture and the judicious use of water resources have resulted in a healthy balance between the livelihood needs and environmental protection. Systemic changes in agriculture practices equipped with necessary resources have increased household income, and ensured surplus food, thereby improving program beneficiaries' quality of life. Additionally, a strong understanding of the importance of working together as a community has led to increasing ownership by and for the community.

With an investment of ₹ 441.87 crore, the programme was able to create a total social value of ₹ 4710 crore, showcasing the success of its impact on the lives of beneficiaries across the country. However, to ensure program beneficiaries continue to value RF BIJ interventions, the team may focus more on building self-reliance among them as well as strengthen program delivery. These include measures such as promoting community-led governance of natural resources, encouraging the continuation of the sustainable agriculture practised via incentivization, strengthening knowledge exchange platforms for beneficiaries to access and avail government schemes, building stakeholder capacity development. The program design should also take into consideration the uniqueness of each location and provide targeted and differentiated approaches to cater to their varying needs. Above all, continuing the success would require RF BIJ to economically integrate the neighbouring urban areas with the rural-program locations to retain the skilled, unskilled and youth population.

The progress towards creating impact in rural areas, as demonstrated in this report, highlights the potential for RF BIJ to help build strong agricultural markets and drive sustainable and impactful growth. The identified impact pathways for RF BIJ are increased adoption and continuation of sustainable agriculture practices to bolster farm yields, increase productivity and profitability by supporting smallholder farmers, increased rural incomes through livelihood generation initiatives and increased rural employment, strengthening agricultural markets and ecosystems.

About Sustainable Square

Sustainable Square is an advisory firm that delivers impact through redefined solutions in the field of social investment, sustainability and environmental practices.

> *More than just an advisory firm; Sustainable Square is a culture in itself.*

Sustainable Square has developed a globally robust Social Impact Measurement Framework and ensures that each intervention is localised and assessed on an individual basis. The Sustainable Square team will scrap what they know to achieve the best result in any context.

Eric Hensel

Co-Founder & Sustainable Square India - CEO Stakeholder Engagement and Research Incharge

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Sr. Sustainability and Social Impact Advisor - Global Research Lead

Jinu George

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Ramesh Balasingh

Stakeholder Engagement Lead - India

SUSTAINABLE SQUARE

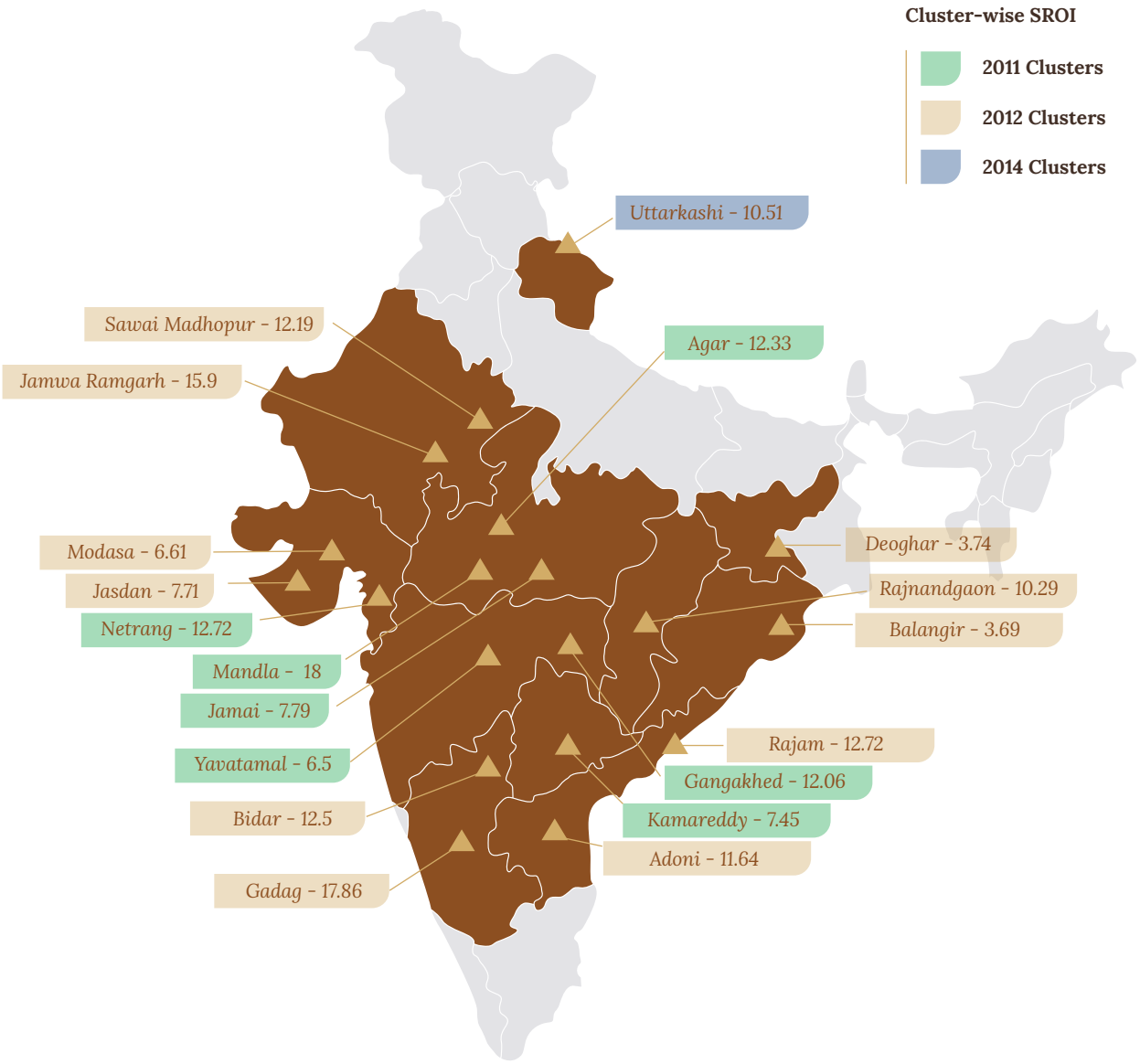
Sustainable Square's team of experts have served leading organisations in various industries across the globe, transforming the way businesses are conducted. The team consists of advisors with expertise covering a spectrum of industry-relevant disciplines. This diversity means that clients can tap into a broad knowledge base and ensures that delivery is always to a high-level global standard. The following table includes all services currently offered:

ESG	Impact Investment	Sustainability & Climate Change	Social Impact
• *ESG Due Diligence* • *ESG Strategies Implementation* • *ESG Benchmarking Analysis* • *ESG Disclosure and Reporting*	• *Impact Portfolio Strategy Development and Management* • *Designing Impact Funds/Bonds and Transaction Advisory* • *Impact Portfolio Evaluation and Management* • *Impact Investment Ecosystem Building*	• *Sustainability Benchmark & Materiality Analysis* • *Sustainability Strategy and Integration* • *Sustainability Reporting & Assurance* • *Sustainable Supply Chains & Procurement* • *SDGs Alignment and Strategies* • *Climate Change Risk Assessment* • *GHG Protocols and Reporting* • *Corporate and Products' Carbon Footprint*	• *Social Investment Strategies* • *Human Rights ImpactAssessments* • *Social Impact Monitoring, Evaluation and Measurement* • *Community Needs Assessments* • *Charity & Philanthropy Management* • *Social Economic Study*

Annex - 1

Cluster-wise SROI

RFBIJ Locations



Clusters formed in 2011

SROI Summary of 2011 Clusters

The SROI ratio of clusters initiated in 2011 ranges from 1:18 (Mandla) to 1:6.5 (Yavatmal), making the average SROI value 1:10.97 for the 2011 clusters.

Cluster Name	SROI	Total Value Created
Netrang	12.72	₹173.3 Cr
Agar	12.33	₹378.68 Cr
Jamai	7.79	₹208.45 Cr
Mandla	18	₹437.92 Cr
Gangakhed	12.06	₹453.74 Cr
Yavatmal	6.5	₹177.75 Cr
Kamareddy	7.45	₹194 Cr

Impact Analysis - 2011 Clusters

This section provides an analysis of the impact created by the programme in each of the sample clusters that were initiated during 2011-2012. The impact value per indicator, as mentioned in this section, is inclusive of external factors and discount rate. Refer to the annexes to view the monetary values assigned by the stakeholders to the impact indicators during choice modelling.

1. Netrang

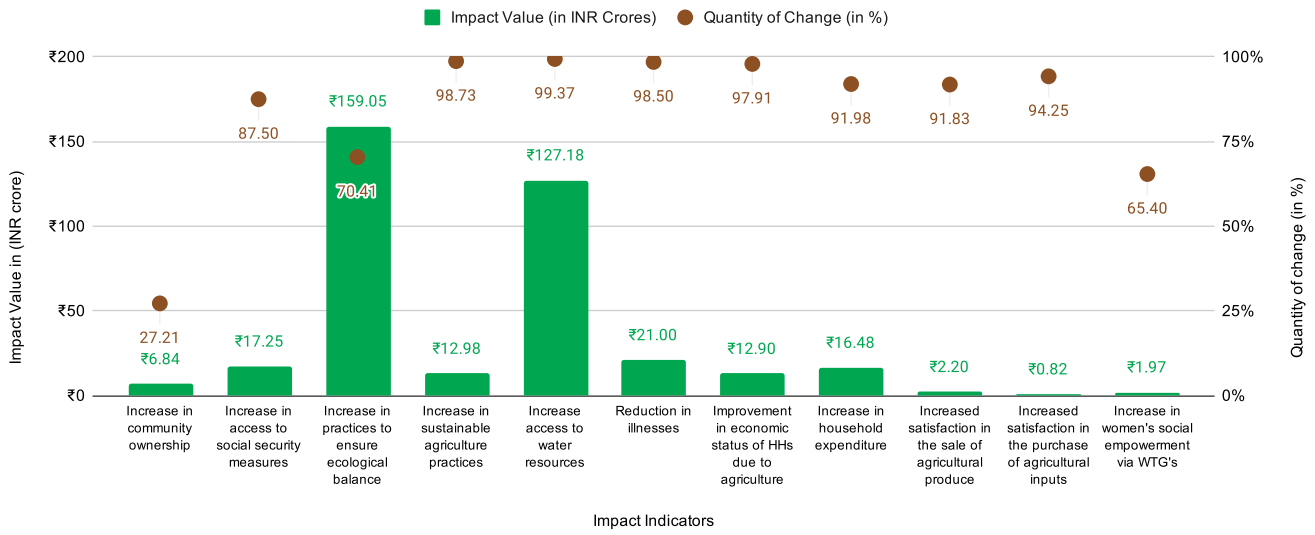
- *90% of the beneficiaries noted improvements to access water resources post intervention and the indicator attributed to 61.4% of the total social value created in the cluster.*
- *The number of people experiencing 'increase in community ownership' remain fairly low (48%) because the majority of them noted that they are afraid of taking risks (96%) and lack the ability to mobilise people (73%).*
- *Despite being valued highly by the beneficiaries, 'Increase in sustainable agriculture practices' could not bring a higher return because near to half of the beneficiaries (49%) no longer practice the new methods of agriculture they were taught.*

Input Cost	**₹13.63 Cr**
Total Present Value	**₹173.3 Cr**
SROI	**1:12.72**

- *As a unique component of the programme, more focus on promotion of sustainable agriculture practice can lead to increase the social value of BIJ in the cluster.*
- *Netrang lies on the higher end of the values compared to the other clusters (Modasa and Jasdan) in Gujarat.*

2. Agar

Impact Analysis Agar



- *The beneficiaries of Agar valued 'increase in access to water resources and increase in practices to ensure ecological balance' the highest out of all impact indicators. Moreover, all beneficiaries reported an 'increase in access to water resources', making water security the strongest intervention area of the programme in Agar.*
- *A challenge in achieving a higher impact value for 'increased satisfaction in the sale of agricultural produce' is due to high externalities caused by the presence of other NGOs and governments working in clusters who are also creating the same impact by offering training programmes to the farmers in Agar (Attribution: 30%).*

Input Cost	**₹30.72 Cr**
Total Present Value	**₹378.68 Cr**
SROI	**1:12.33**

- *Since the number of SHG/WTG members experiencing an 'increase in women empowerment' (65%) depends on a combination of factors, the impact value created due to the indicator depends on the response to each of these factors. Here, the strongest factors reported by the beneficiaries were:*

- *being able to fulfil their aims after joining the SHG (95%),*

- *undergoing vocational training (90%) and*

- *a positive change in the community's perspective towards women's rights (75% positive and 25% very positive).*

- *However, a lack of entrepreneurial spirit amongst the SHG/WTG members (90%), lack of educational opportunities (65%) and personal wellbeing (80%) was documented. These are matters worth considering to increase the social impact created in Agar.*

3. Jamai

- *The stakeholders of Jamai have a strong sense of value for improvement in economic status due to agriculture which was satisfied through the interventions for 85.83% of the stakeholders.*

- *Despite being valued the highest by the beneficiaries, 'increased satisfaction in the sale of agricultural produce' could only fall second to impact value created by 'increase in access to water resources' due to a relatively lower quantity of change (85%). The reasons for which can be traced to the the lower levels of satisfaction reported by the FPO members in the following matter:*

Input Cost	**₹26.75 Cr**
Total Present Value	**₹208.45 Cr**
SROI	**1:7.79**

- *mode of collection of produce/crops (20% unsatisfied),*

- *mode of payment for produce/crop (20% unsatisfied),*

- *procedure for weighing of produce (20% extremely unsatisfied and 40% unsatisfied),*

- *price paid for produce/crop (20% extremely unsatisfied and 40% unsatisfied) and*

- *time taken in the selling of produce/crop (10% unsatisfied).*

4. Mandla

- *'Increase in household expenditure' brought in the highest social value for Mandla by the beneficiaries, a good amount of beneficiaries experiencing the impact (80%) and low external factors (including 0% attribution recorded).*
- *Mandla became a water-secure cluster due to the programme's intervention as 91% of the beneficiaries reported experiencing an increase in access to water resources. However, due to external factors such as water facilities provided by the government in the cluster, the value of the impact could not reach its maximum potential.*
- *Even though 'increased satisfaction in the sale of agricultural produce' was given the higher value when compared to Agar and other clusters by the beneficiaries,*

Input Cost	**₹24.33 Cr**
Total Present Value	**₹437.92 Cr**
SROI	**1:18**

it could not deliver a higher return due to the following reasons:

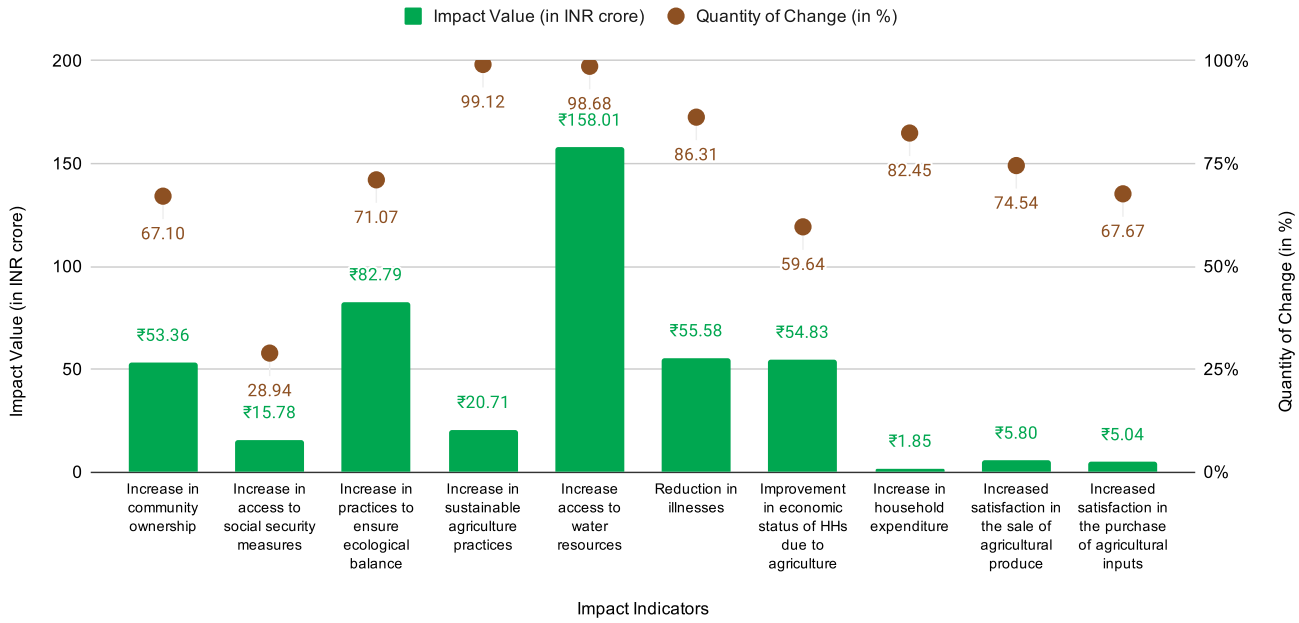
- *Only 50% of the beneficiaries have confidence in the FPO with 'less chance of malpractice.'*
- *20% of the beneficiaries are unsatisfied with the mode of collection of produce/crops by the FPO*
- *10% of the beneficiaries reported being unsatisfied with the time taken in selling of produce/crop by the FPO*

5. Gangakhed

- *In Gangakhed, access to water resources is a priority for its people and the programme delivered based on this priority. Access to water resources was reportedly experienced by almost all beneficiaries (99%).*
- *Increase in practices to ensure ecological balance is another matter of high value for the beneficiaries of the cluster, but it couldn't give a higher return like 'increase in access to water resources' due to a comparatively lower response rate (71%). This is mainly because only 30% of the beneficiaries make use of clean fuel such as biogas.*

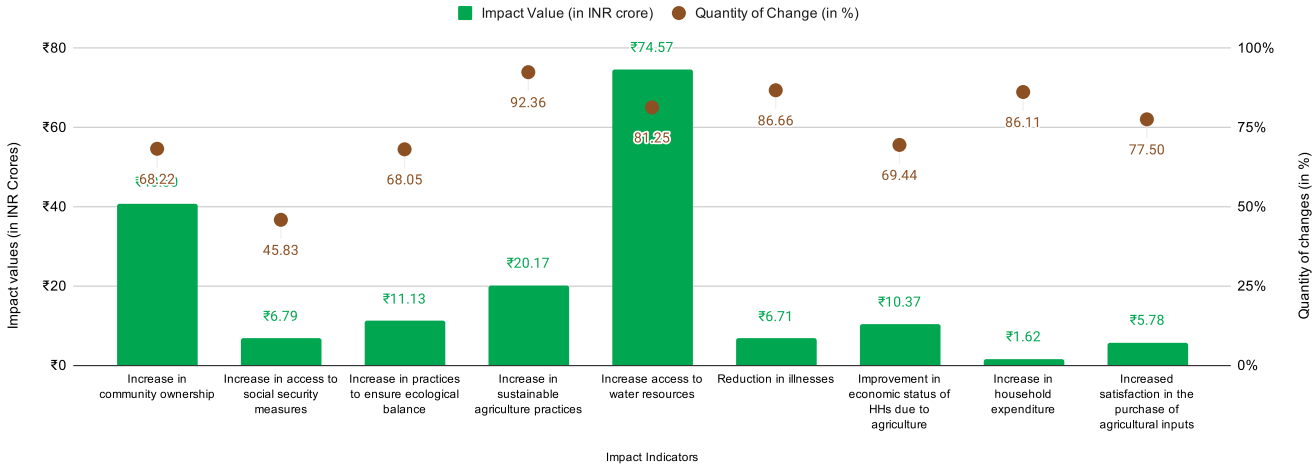
Input Cost	**₹37.61 Cr**
Total Present Value	**₹453.74 Cr**
SROI	**1:12.06**

Impact Analysis: Gangakhed



6. Yavatmal

Impact Analysis: Yavatmal



- *Increased availability of drinking water through the construction of wells and water pumps in households led to an increase in access to water resources as having the highest social value (i.e. 46% of the total social value created in Yavatmal) with 81% of stakeholders experiencing the change.*
- *Even though the percentage of beneficiaries experiencing an increase in community ownership is only 68%, the*

Input Cost	**₹27.34 Cr**
Total Present Value	**₹177.75 Cr**
SROI	**1:6.5**

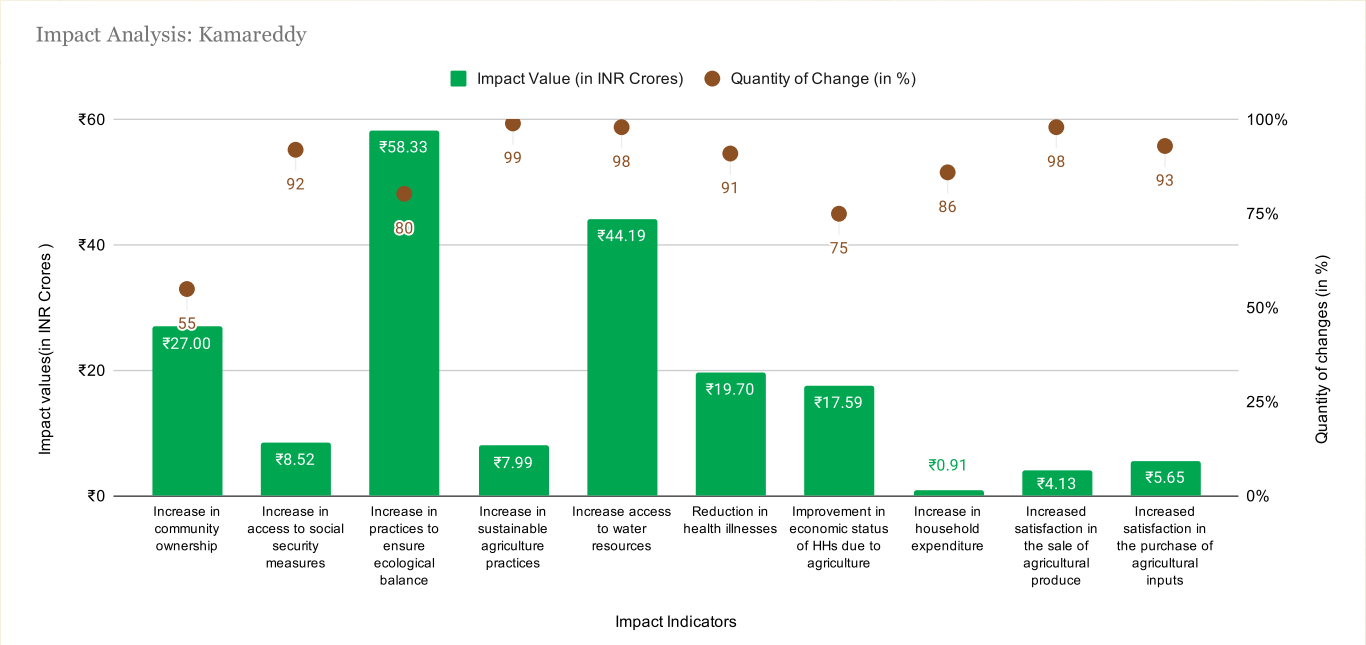
Yavatmal cluster gave the second-highest social value for Increase in community ownership. This is due to:

- *Training and exposure visits conducted*
- *Improved participation of women through methods like Dual Membership*

- *92% of stakeholders observed a surge in sustainable agriculture practices adopted, however this is only the third-highest social value due to lack of continuation.*
- *Yavatmal stakeholders shared the active presence of Maharashtra VSTF (Village Social Transformation Foundation) operations. The percentage of the population experiencing an increase in access to social security measures remains low among all indicators (i.e., 46%). To increase this percentage, RF BIJ can work on the process re-engineering of government programmes to ensure effective delivery of services.*

- *With the help of RF BIJ interventions, villagers can receive surplus water and distribute the same to nearby villages.*
- *RF BIJ efforts, along with government interventions equipped Yavatmal to achieve awards like Paani Foundation Award (2018) & appreciation across the state.*

7. Kamareddy



- *Increase in practices to ensure ecological balance stood highest, constituting 30% of the total social value created from Kamareddy, with 80% of stakeholders experiencing change. Adoption of water conservation methods like rainwater harvesting and creation of farm ponds led to the same.*

- *FPOs from Kamareddy created successful value chains for farmers' produce with:*
  - *98% of FPO members stakeholders experiencing Increased satisfaction in the sale of produce.*
  - *Fourth highest social value among all indicators.*

- *The availability of other sources for buying agricultural inputs with 43% FPO members depending on the same led to less valuation of "Increased satisfaction in the purchase of agricultural inputs", despite 93% FPO members experiencing the change.*

- *'Increase in access to social security measures' has a lower impact value because of the strong role of the government (as reflected in the attribution) in creating similar impact by providing financial support and other services.*

Input Cost	**₹26.05 Cr**
Total Present Value	**₹194 Cr**
SROI	**1:7.45**

Clusters formed in 2012

SROI Summary of 2012 Clusters

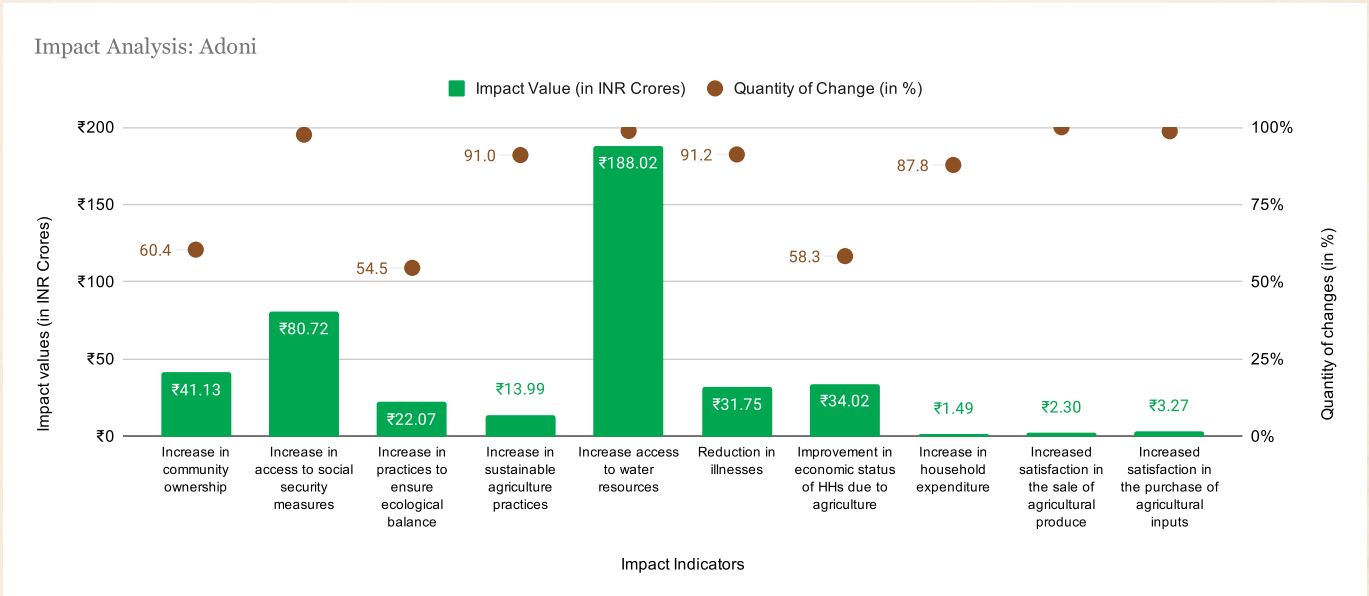
The SROI ratio of clusters initiated in 2012 ranges from 1:3.69 (Balangir) to 1:17.86 (Gadag), making the average SROI value 1:10.44 for the 2012 clusters.

Cluster Name	SROI	Total Value Created
Adoni	11.64	₹418.76 Cr
Rajam	12.72	₹224.99 Cr
Rajnandgaon	10.29	₹98.36 Cr
Jasdan	7.71	₹177.99 Cr
Modasa	6.61	₹134.33 Cr
Deoghar	3.74	₹49.38 Cr
Bidar	12.5	₹535.7 Cr
Gadag	17.86	₹294.26 Cr
Balangir	3.69	₹107 Cr
Jamwa Ramgarh	15.9	₹334 Cr
Sawai Madhopur	12.19	₹261 Cr

Impact Analysis - 2012 Clusters

This section provides an analysis of the impact created by the programme in each of the sample clusters that were initiated during 2012-2013.

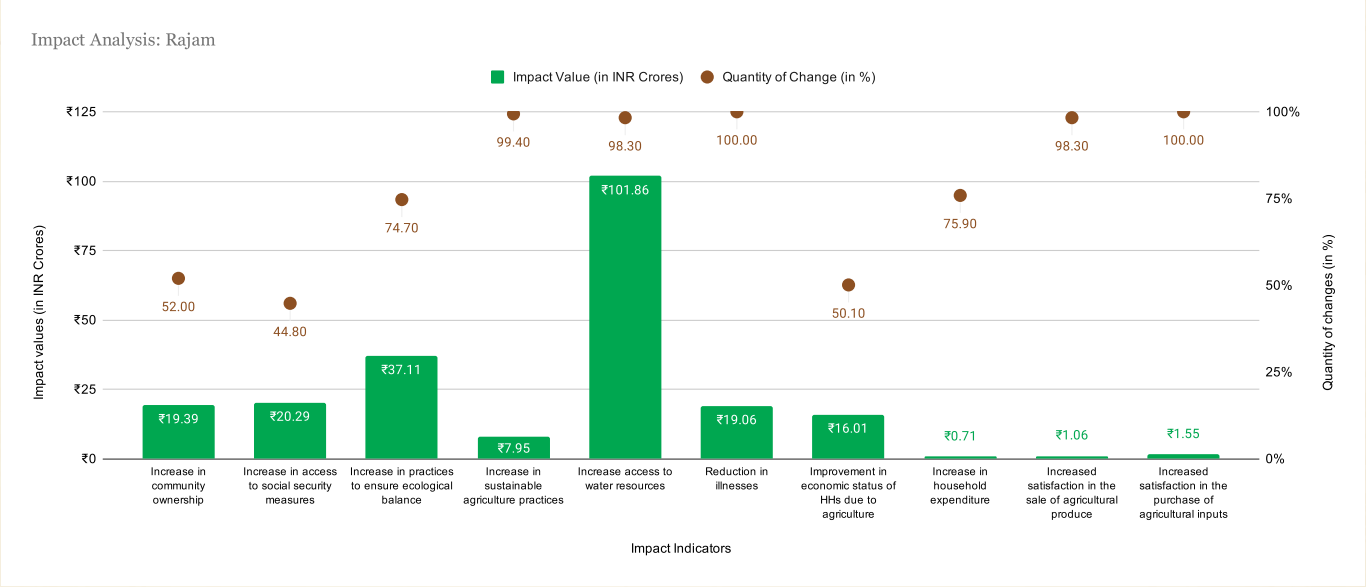
1. Adoni



- *Increase in access to water resources, access to social measures and increased community ownership have been value generators for years, together accounting to 74% of the total social value created.*
- *Social value is low in regards to increased satisfaction in the sale of agricultural produce and the purchase of farming inputs, despite their high percentage of change of 100% & 99%, respectively. The reason for the low value is that FPO members depend on other available options for the sale of produce and purchase of agricultural inputs.*

Input Cost	₹35.97 Cr
Total Present Value	₹418.76 Cr
SROI	1:11.64

2. Rajam



- *Increase in access to water resources alone is 45% of the total social value created with 98% of stakeholders experiencing the change from Rajam.*
- *Indicators with less social value and a high percentage of change:*

  - 98% of FPO members stakeholders experiencing Increased satisfaction in the sale of produce.

  - Fourth highest social value among all indicators.
- *The reason for the above trend is due to the dependence of farmers on an external value chain.*
- *High externalities due to the active presence of public health stakeholders are the reason for the lowest social value for reduction in illness.*

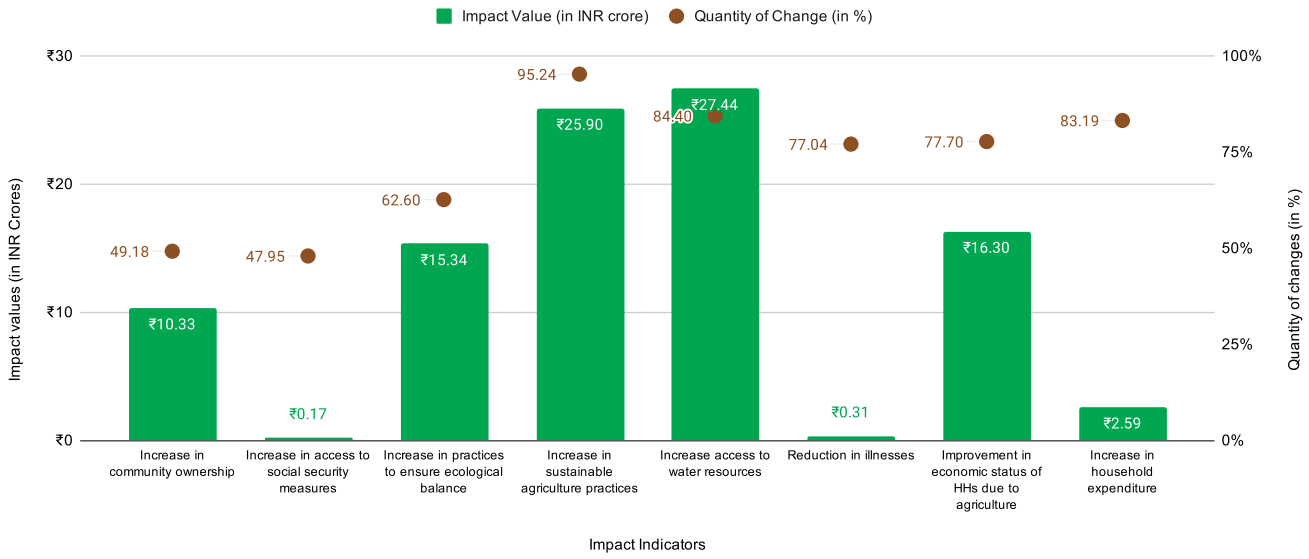
Input Cost	₹17.69 Cr
Total Present Value	₹224.99 Cr
SROI	1:12.72

- *With only 52% experiencing Increase in community ownership due to the fact that more than 40% of VA households observed a lack of below-mentioned skills:*
  - *Communication*
  - *Motivation*
  - *Responsibility*
  - *Confidence*
  - *Risk taking*
  - *Participation in decision making*
  - *Community mobilisation*

- *Focusing on strengthening the approach towards training beneficiaries on necessary life skills through well-defined modules can improve self-governance of RF BIJ initiatives.*

3. Rajnandgaon

Impact Analysis: Rajnandgaon



- *Water is an increasingly expensive resource in rural agrarian regions like Rajnandgaon. As a result, RF BIJ beneficiaries value increase in access to water resources most highly, which is 27.9% total social value. RF BIJ strengthened livelihood requirements in water-stressed rural areas such as Rajnandgaon.*
- *Reducing rural distress and migration led VA households to value improvement in economic status of HHs due to agriculture as high, with 78% experiencing change.*
- *The low social value and percentage of VA households experiencing increased community ownership is mainly due to the following:*

  - WTG/SHG/FPO activities need to be initiated (clusters lack the same)

  - Strengthening the planned modular training sessions on the necessary skills to create community ownership is crucial. Baseline assessment of those listed skills are given below:

  - 70% lack motivation

  - 45% lack responsibility

  - 66% lack positivity

Input Cost	**₹9.56 Cr**
Total Present Value	**₹98.37 Cr**
SROI	**1:10.29**

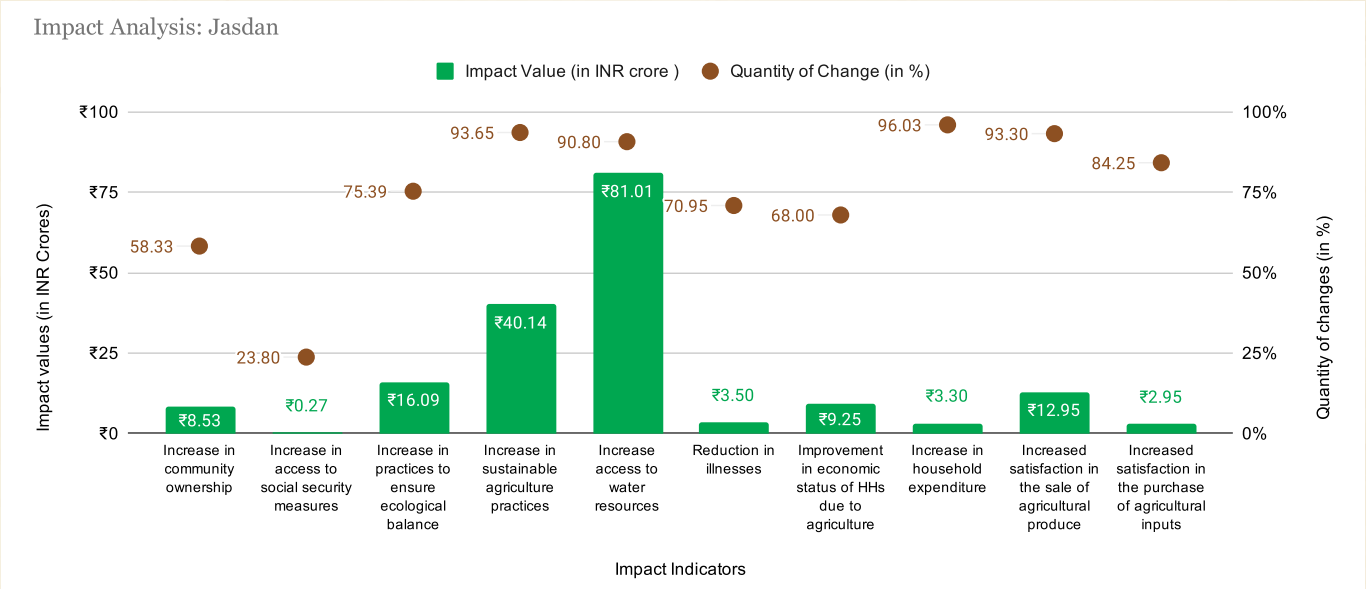
  - 55% unwilling to take risks

  - 62% have zero participation in decision making

  - 76% are unaware of community mobilisation techniques

- *Lower social value, even after 95% of stakeholders experienced an increase in sustainable agriculture practices due to the presence of training organisations RF partnered with, and government activities.*
- *'Increase in access to social security measures' created a lower impact value because the government and other organizations (including Surya Foundation, Samarathan, JIZ) are also working to ensure that the beneficiaries have greater access to social security measures.*

4. Jasdan



- *Beneficiaries who were previously rain-dependent for agriculture are now experiencing an increase in water availability due to construction of check dams and deepening of existing ponds.*
- *Therefore, increase in access to water resources is valued high and experienced by 90.8%. This has resulted in crops being grown in both Kharif and Rabi seasons.*
- *The increased water availability is being used judiciously by moving from the water-intensive cotton crop to the less water-intensive and profitable ground nuts.*
- *The change has brought significant benefits to Agri allied activities as well. For instance, the groundnut stem is highly nutritious for livestock. As a result of its increased production, daily milk production has gone up from 600 to 5000 litres a day in a village called Somalpur.*

Input Cost	**₹23.09 Cr**
Total Present Value	**₹177.99 Cr**
SROI	**1:7.71**

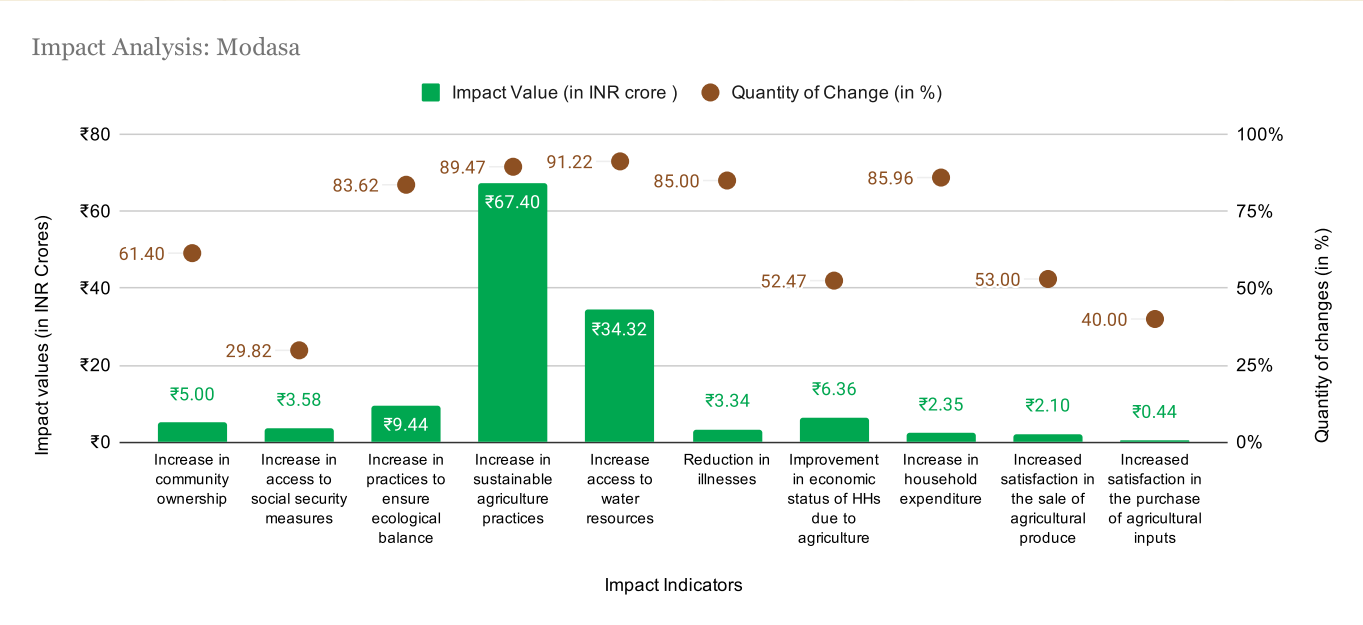
- *93.3% and 84.25% of the population is experiencing increased satisfaction in the sale of agricultural products and in the purchase of agricultural inputs respectively. They now receive timely payment and a better price for their produce while eliminating the role of middlemen. The beneficiaries are also able to save significant expenses involved in selling produce at APMC.*
- *Increase in access to social security is both the least valued and least experienced indicator, as access to government welfare schemes is still low.*

5. Modasa

- *Increase in access to water resources is the most experienced indicator (91.21%), which suggests that significant investments made in the area of irrigation have been effective.*
- *Indicators related to FPOs have been valued the lowest as farming was always perceived to be a traditional occupation and not a profitable occupation. Hence, the success of FPOs would need the embodiment of a professional management perspective into their business operations including planning, production, post-production, branding, marketing etc.*

Input Cost	**₹20.31 Cr**
Total Present Value	**₹134.33 Cr**
SROI	**1:6.61**

- *50% of the total social value created is accredited to increase in sustainable agriculture practices, showcasing the value of this particular change brought about by the intervention in the lives of the beneficiary.*



6. Deoghar

- *Beneficiaries have assigned the highest value to interventions carried out to create water harvesting structures in the village. 99% experienced an increased availability of water, which has directly enhanced their livelihood as they report growing crops 2-3 times a year, resulting in a 50% increase in food security in villages.*
- *Both increase in practices to ensure ecological balance and increase in sustainable agriculture practices have been valued and experienced by the beneficiaries almost equally. RF BIJ's strong focus on promoting sustainability in agriculture by discouraging unsustainable methods like borewells and encouraging usage of organic inputs, have enhanced the livelihood of 356 households in the cluster as their cultivation costs have gone down.*
- *'Increase in access to social security measures' created a lower impact value because the role of the government and other organizations (including Samvad NGO, CCW, Mission Badlav) is strong in creating similar impact.*

Input Cost	**₹13.19 Cr**
Total Present Value	**₹49.38 Cr**
SROI	**1:3.74**

- *Although the increase in community ownership is the second most valued impact indicator, it is significantly low at 24% for the following reasons:*
  - *82% lack the desire to accomplish goals*
  - *69% lack responsibility*
  - *84% lack positivity*
  - *65% lack faith in themselves*
  - *98% have a fear of failure*
  - *90% don't participate in decision making*
  - *96% lack the ability to mobilise people*

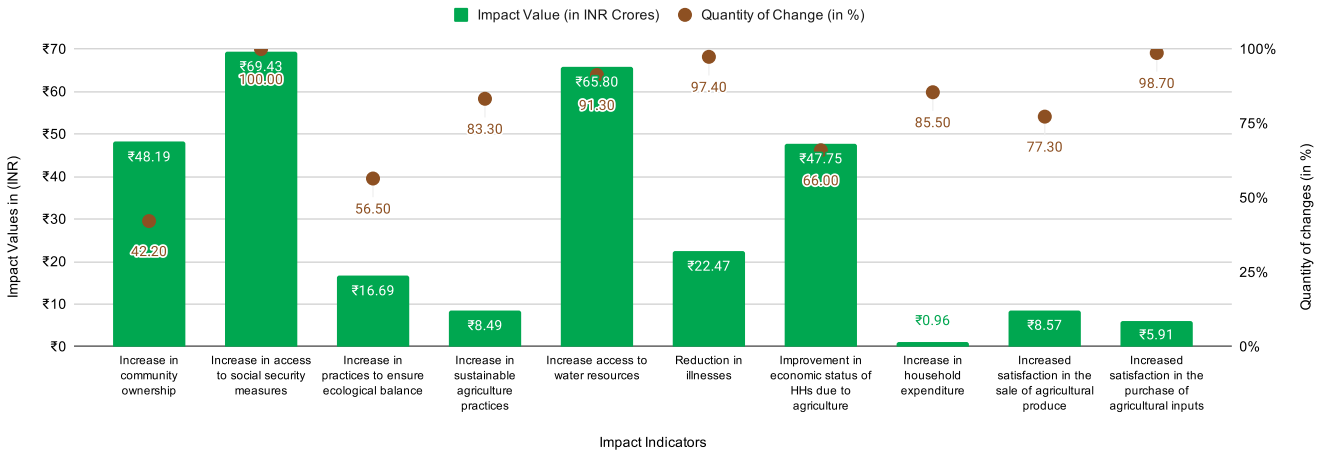
7. Bidar

- *Increase in community ownership and increased access to water resources highly valued in the cluster.*
- *Although the increase in community ownership is highly valued, the percentage of VA members experiencing the change is low, as 62% of the participants reported to have not taken part in decision making. Additionally, youth participation during the assessment was low, which indicates that their ownership in the programme is meagre. Hence, initiatives to increase the participation of all age groups could be vital for the long term sustainability of the programme, which will, in turn, increase community ownership.*
- *26% of the population does not have RNG in their homes, which is why reduction in illness created is one of the lowest impacts in the cluster.*

Input Cost	**₹42.84 Cr**
Total Present Value	**₹535.7 Cr**
SROI	**1:12.5**

8. Gadag

Impact Analysis: Gadag

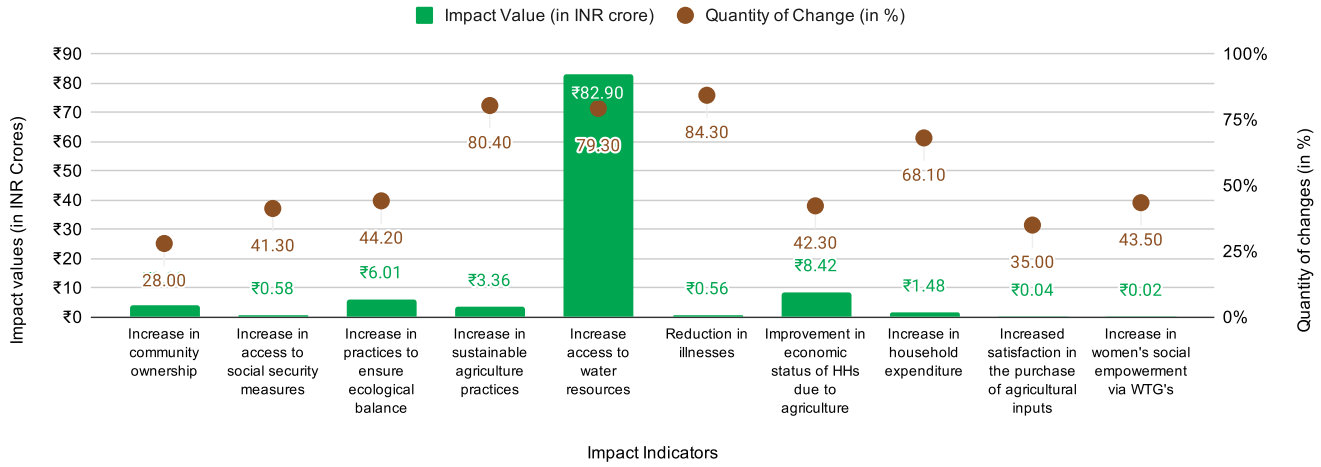


- *A history of being neglected from government benefits was changed due to RF BIJ's interventions. Hence, the increase in access to social security measures was the highest valued impact indicator here, creating a total of ₹ 69.43 crore of social value to date.*
- *Increased satisfaction in the sale of agricultural produce created a high impact because by selling through FPO,*
  - *100% feel that they receive "immediate payment"*
  - *90% opine that there is a "less chance of malpractice"*
  - *And another 90% feel that they "receive the right price" for their crop*
- *100% and 91.3% have started 'mixed cropping' and 'reduced the cost of cultivation by low dependence on chemical inputs' respectively due to sustainable agriculture practices reaching 83%.*
- *Only 4.34% agreed that they'd taken part in the decision-making processes of VA, which indicates why only 42% felt an increase in community ownership.*

Input Cost	**₹16.47 Cr**
Total Present Value	**₹294.26 Cr**
SROI	**1:17.86**

9. Balangir

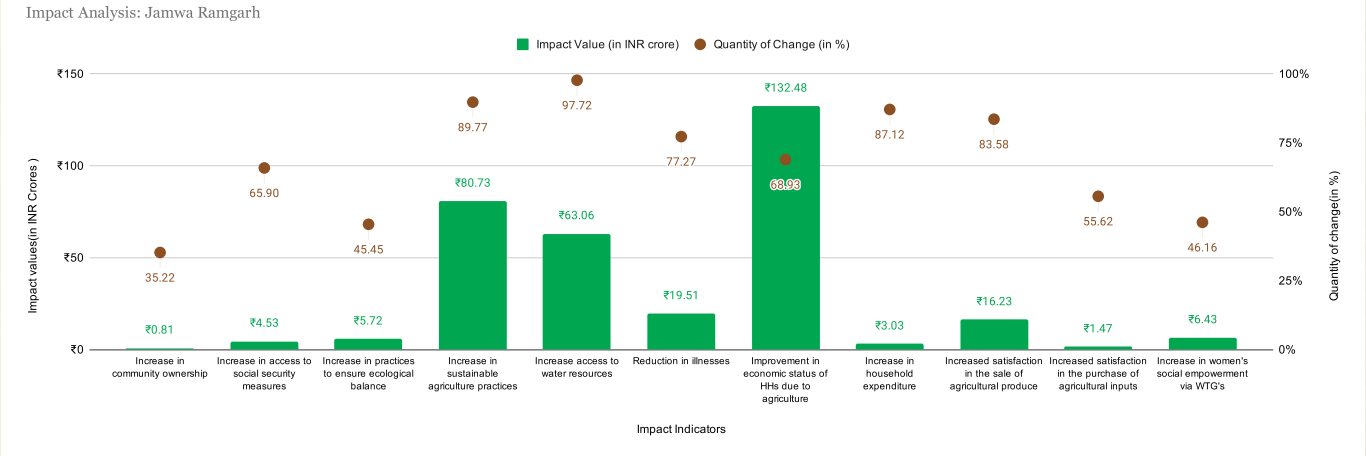
Impact Analysis: Balangir



- *Water is a critical element for farming and other household needs. Households in Balangir have valued 'increase in access to water resources' the highest amongst all changes. The beneficiaries are no longer dependent on monsoons for harvest due to increased availability of water, as a result of groundwater recharge initiatives.*
- *Increase in economic status of HHs has been highly valued in comparison to other indicators due to increased income from agriculture. Beneficiaries are now able to afford a better quality of life and think decisively about their future.*
- *Increase in women empowerment has been valued lower than the other indicators. The quantity of change has been observed to be lower, particularly due to lack of entrepreneurial spirit (only 7% of the SHG/WTG members started their own business) and low social and personal wellbeing. Only 7% reported 'improved relationships with family members', 'increase in educational opportunities' and 'spending more time for myself'.*

Input Cost	**₹29.07 Cr**
Total Present Value	**₹107 Cr**
SROI	**1:3.69**

10. Jamwa Ramgarh



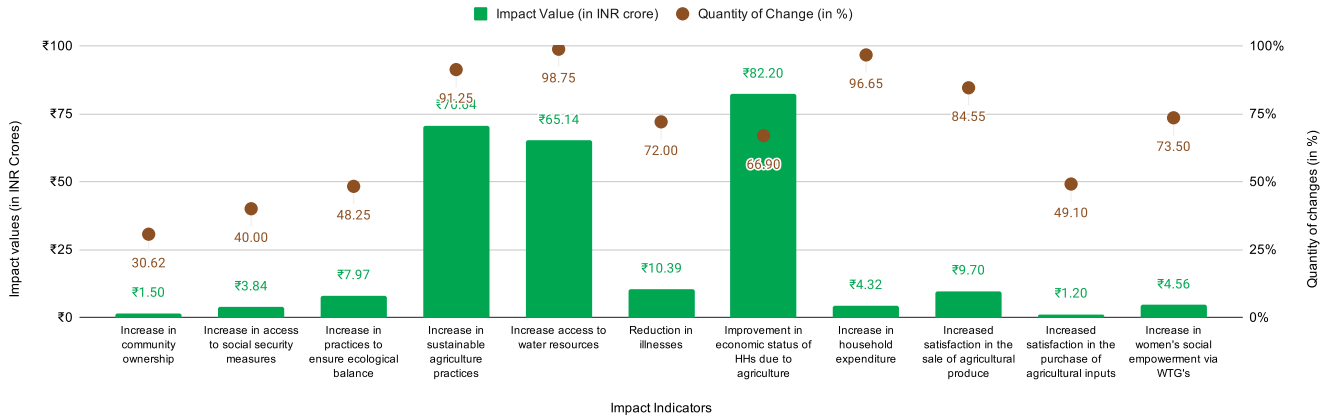
- *Water in Rajasthan is considered to be a precious resource, due to its lack of availability in the region. Likewise, increased access to water resources (98%) has had the highest degree of change perceived by beneficiaries, although beneficiaries have valued this change less than improvement in economic status due to agriculture.*
- *Improvement in economic status due to agriculture has been valued the most amongst the beneficiaries from Jamwa Ramgargh. However, the proportion of beneficiaries feeling a change in economic status (69%) is moderately high.*
- *There has not been significant change in community ownership (35%) compared to other changes and the same has been valued the lowest.*

Input Cost	**₹21.01 Cr**
Total Present Value	**₹334 Cr**
SROI	**1:15.9**

- *A high drop-off rate was noted for 'Increase in practices to ensure ecological balance' to account for 70% of the respondents that claimed that the groundwater has decreased over the years.*

11. Sawai Madhopur

Impact Analysis: Sawai Madhopur



- *Improvement in economic status of HHs due to agriculture has been valued most by the beneficiaries but a lower number of beneficiaries have felt this change in their lives.*
- *Increase in sustainable agriculture practices has been valued high by the beneficiaries as they have acquired new skills and knowledge through the training conducted through RF BIJ. With 91% of change observed by the beneficiaries on sustainable farming due to lower usage or less dependence on chemical fertilisers and mixed cropping, which ensures there is no decline in soil fertility.*
- *There is significant availability of water due to the construction of water harvesting systems. 99% of beneficiaries are now able to access water compared to before RF BIJ's intervention.*

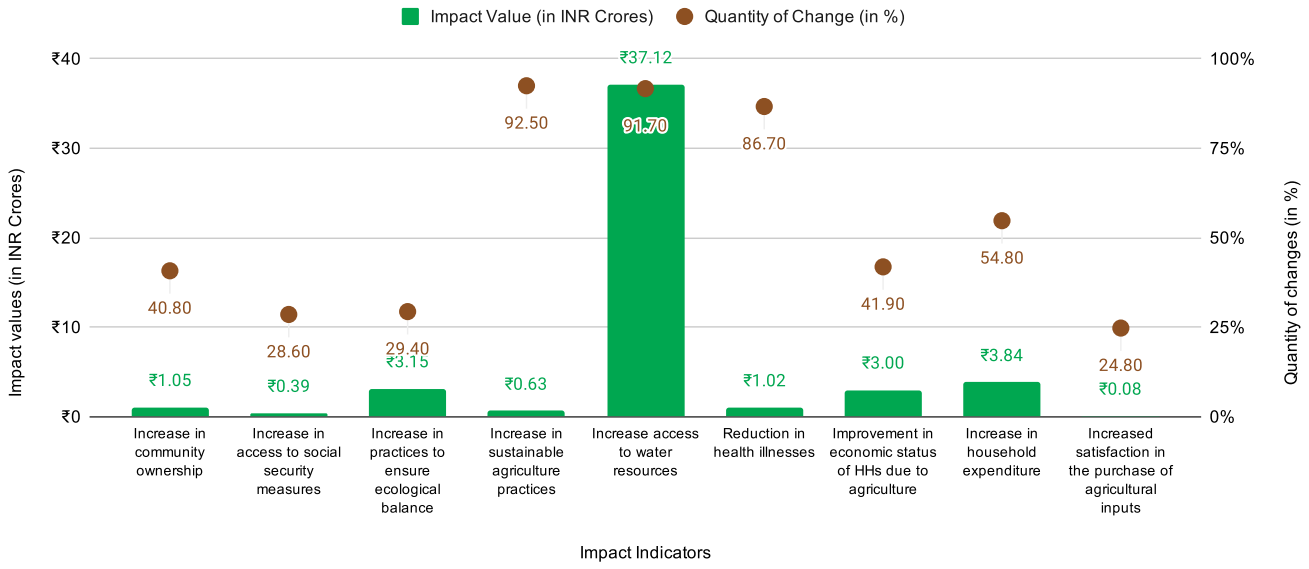
Input Cost	**₹21.46 Cr**
Total Present Value	**₹261 Cr**
SROI	**1:12.19**

- *Community ownership has a smaller percentage of change (31%), with the value perceived by the beneficiary also towards the lower segment of the social values created by the programme.*
- *'Reduction in illnesses' has a lower impact value because 44% of the beneficiaries are not maintaining a healthy diet and there are others including ASHA, ANM who are creating similar impact.*

Clusters formed in 2014

1. Uttarkashi

Impact Analysis: Uttarkashi



- *Increase in access to water resources and increases in sustainable agricultural practices has been the highest felt impact amongst the beneficiaries in Uttarkashi. Training on potato farming and high yielding seeds have imparted knowledge to the beneficiary about optimising the use of available resources.*

Input Cost	₹4.78 Cr
Total Present Value	₹50.27 Cr
SROI	1:10.51

- *The cluster initiation in this region has an important role to play with beneficiaries valuing the changes. Due to its remote location and challenging terrain, the beneficiaries understand the importance of self-reliance and ownership. For example, animal destruction of cultivated land was commonly observed before RF BIJ. Due to RF BIJ, the communities were able to create a fence. The labour and effort to create the fence was contributed by beneficiaries.*
- *'Increase in access to social security measures' has a low impact value because of the role of the government and multiple organizations (including Wingy Foundation, SBMA, Ajeevika and Eight India) in creating similar impact. These organizations were already working on creating similar impact in the cluster before the programme was launched.*

Annex - 2
Sampling Details

Sampling Details							
State	**Total No. of HHs per Cluster**	**Total No. of HHs per state**	**Percentage of Total HHs**	**Sample Size (Estd)***	**Final Engagement decided during kick-off****	**Final Clusters*****	**Final Sample Size Achieved**
Andhra Pradesh	Adoni - 3853 Rajam - 2110	5963	8.7%	57	60	Adoni Rajam	41 29
Chattisgarh	Rajnandgaon - 1220	1220	1.8%	12	20	Rajnandgaon	50
Jharkhand	Deoghar - 1569	1569	2.3%	15	20	Deoghar	49
Tamil Nadu****	Karaikudi - 2338	2338	3.4%	22	30	NA	NA
Gujarat	Jasdan - 3349 Modasa - 2725 Netrang - 2101 Radhanpur - 2364	10539	15.3%	101	101	Jasdan Netrang Modasa	42 52 57
Madhya Pradesh	Agar - 4923 Itarsi - 534 Jamai - 1760 Mandla - 3169 Panna - 1419 Sendhwa - 1404 Seoni - 2736	15945	23.2%	153	160	Agar Jamai Mandla	79 40 41
Rajasthan	Banswara - 1381 Jamwa Ramgarh - 3187 Sawai Madhopur - 3634	8202	11.9%	79	80	Jamwa Ramgarh Sawai Madhopur	44 40
Karnataka	Bidar - 4559 Gadag - 2537	7096	10.3%	68	70	Bidar Gadag	50 23
Maharashtra	Gangakhed - 4253 Yavatmal - 3562	7815	11.4%	75	80	Gangakhed Yavatmal	37 48
Telangana	Kamareddy - 2373	2373	3.4%	23	30	Kamareddy	49
Odisha	Balangir - 3865	3865	5.6%	37	40	Balangir	46
Uttarakhand	Rudraprayag - 942 Uttarkashi - 925	1867	2.7%	18	20	Uttarkashi	42
Total	**27**	**68,792**	**100%**	660	**711**	**19**	**859**

** The estimated sample size for each state is according to the percentage of total HHs in each state.*

*** The final no. of HH engagements for each state was decided during the kick-off meeting with RF-BIJ team.*

**** The clusters for the sample were selected based on various factors such as year of initiation and geography.*

***** Tamil Nadu was not covered during the data collection for final stakeholder engagement due to logistic concerns.*

State	Cluster	FPO Sample Size Reached	WTG/SHG Sample Size Reached*
Andhra Pradesh	*Adoni*	10	NA
	Rajam	10	NA
Chhattisgarh	*Rajnandgaon*	13	NA
Gujarat	*Jasdan*	12	6
	Modasa	16	NA
	Netrang	14	12
Jharkhand	*Deoghar*	17	16
Karnataka	*Bidar*	15	NA
	Gadag	10	NA
Madhya Pradesh	*Agar*	20	20
	Jamai	10	17
	Mandla	10	5
Maharashtra	*Gangakhed*	11	NA
	Yavatmal	16	NA
Odisha	*Balangir*	16	14
Rajasthan	*Jamwa Ramgargh*	20	24
	Sawai Madhopur	20	24
Telangana	*Kamareddy*	12	NA
Uttarakhand	*Uttarkashi*	8	NA
Total		**260**	**138**

** WTGs were not either set-up or active in some clusters due to which women were not interviewed for the WTG questionnaire in those clusters and hence, female respondents were covered in the HH surveys due to dual membership.*

Annex - 3
Study Limitations and Mitigation Strategy

Study Limitation	Detail	Mitigation Strategy
Challenges relating to the Covid-19 Pandemic and Nationwide Lockdown	The Covid-19 pandemic and subsequent nationwide lockdown and travel restrictions slowed down the data collection process. Moreover, the impact of the pandemic on the lives of the respondents also affected their responses.	The research team completed the on-field data collection by following the rules and regulations relating to pandemic travel. Multiple modes of data collection was adopted by the research team to ensure the data's quality. In regards to the programme's respondents, qualitative inputs suggest they were able to cope with the pandemic since they sustained themselves entirely on the vegetables grown in their backyards or garden, under RNG. They had enough grains to surpass the lockdown period without any significant issues. Many beneficiaries had already stopped seasonal migration due to RF BIJ interventions and remained relatively unaffected due to the lockdown.
Limited time and availability among respondents	The data collection process coincided with the harvesting season in all sample clusters. Thus, owing to the respondents' ongoing work engagement in their fields, the research team had to rely on the stakeholders arranged by the local RF team for surveys and interviews. Random selection of the respondents was not possible.	The team split their engagement activities into two sessions (early morning and late evening) to mitigate restrictions placed on respondents' availability.
Language barriers	In the Southern clusters, language issues impacted the data collection process since the researcher could not directly engage with the respondents. In some locations, logistical requirements resulted in the presence of RF team members or alternative translating entities.	Conducted daily reviews with the stakeholder engagement team to verify the data collected and adjusted wherever necessary.
Low participation among women and youth community members	Women and youth participation was low for the FGD and Choice modelling exercises. In some cases, this participation was as low as one or two beneficiaries. Most of the locations were conservative, and female presence alongside elderly males was resisted. Hence, it was difficult to ensure female participation during group activities.	While the social norms of the locations did not allow the research team to engage significantly with women beneficiaries during group discussions, it was nevertheless ensured that women participated in household surveys. Likewise, 25% of the respondents for the household survey were women.
Choice Modelling Valuation Exercise	During the data analysis, it was observed that the choice modelling values (values given by beneficiaries) seemed to be skewed for the southern clusters due to language, translation or lack of understanding of the exercise. At Uttarkashi due to lack of availability of beneficiaries, due to the harvest season and geography, the choice modelling exercise was only conducted at one village, resulting in higher value for the indicators of change.	Values from the nearest cluster were used as an internal proxy reference for the southern clusters and further adjusted with Consumer Price Index. Similarly, for Uttrakhand, an average of Madhya Pradesh choice modelling values were used after being adjusted for Consumer Prices Index for the state.

Annex - 4

Input Cost

Input cost for all clusters (Direct Investment and Cost Leveraged through stakeholders) were provided by the Reliance Foundation's BIJ Team. The beneficiary input with respect to the time spent on execution of the initiatives were calculated based on minimum wages per state and approximate man-days invested into the programme.

State	Particulars	Input Cost	Total
Netrang	*Cost of labour input by beneficiaries* *Money leveraged from govt* *Money invested by RF BIJ*	19,551,025 36,190,942 80,512,774	1,36,254,741
Agar	*Cost of labour input by beneficiaries* *Money leveraged from govt* *Money invested by RF BIJ*	38,426,477 113,832,284 154,895,367	3,07,154,128
Jamai	*Cost of labour input by beneficiaries* *Money leveraged from govt* *Money invested by RF BIJ*	13,737,680 83,881,238 169,871,992	2,67,490,910
Mandla	*Cost of labour input by beneficiaries* *Money leveraged from govt* *Money invested by RF BIJ*	24,751,241 70,197,982 148,363,539	2,43,312,762
Gangakhed	*Cost of labour input by beneficiaries* *Money leveraged from govt* *Money invested by RF BIJ*	37,590,542 157,868,722 180,660,359	3,76,119,623
Yavatmal	*Cost of labour input by beneficiaries* *Money leveraged from govt* *Money invested by RF BIJ*	31,450,430 99,345,781 142,641,683	2,73,437,894
Kamareddy	*Cost of labour input from beneficiaries* *Money leveraged from govt* *Money invested by RF BIJ*	20,805,666 100,543,769 139,129,926	2,60,479,361
Adoni	*Cost of labour input from beneficiaries* *Money leveraged from govt* *Money invested by RF BIJ*	34,725,163 163,117,394 161,824,513	3,59,667,070
Rajam	*Cost of labour input by beneficiaries* *Money leveraged from govt* *Money invested by RF BIJ*	19,016,375 53,391,096 104,504,248	1,76,911,719
Rajnandgaon	*Cost of labour input by beneficiaries* *Money leveraged from govt* *Money invested by RF BIJ*	9,782,875 25,278,599 60,505,652	95,567,126

State	Particulars	Input Cost	Total
Jasdan	*Cost of labour input by beneficiaries* *Money leveraged from govt* *Money invested by RF BIJ*	29,510,156 58,160,769 143,222,431	2,30,893,356
Modasa	*Cost of labour input by beneficiaries* *Money leveraged from govt* *Money invested by RF BIJ*	23,494,456 75,231,855 104,418,692	2,03,145,003
Deoghar	*Cost of labour input by beneficiaries* *Money leveraged from govt* *Money invested by RF BIJ*	12,295,063 38,401,417 81,229,017	1,31,925,497
Bidar	*Cost of labour input by beneficiaries* *Money leveraged from govt* *Money invested by RF BIJ*	47,926,488 150,608,350 229,891,531	4,28,426,369
Gadag	*Cost of labour input by beneficiaries* *Money leveraged from govt* *Money invested by RF BIJ*	26,670,213 34,698,320 103,380,646	1,64,749,179
Balangir	*Cost of labour input by beneficiaries* *Money leveraged from govt* *Money invested by RF BIJ*	32,055,344 47,536,940 211,083,259	2,90,675,543
Jamwa Ramgarh	*Cost of labour input by beneficiaries* *Money leveraged from govt* *Money invested by RF BIJ*	27,527,713 37,901,504 144,642,879	2,10,072,096
Sawai Madhopur	*Cost of labour input by beneficiaries* *Money leveraged from govt* *Money invested by RF BIJ*	31,423,225 39,551,167 143,577,251	2,14,551,643
Uttarkashi	*Cost of labour input by beneficiaries* *Money leveraged from govt* *Money invested by RF BIJ*	7,897,188 17,018,126 22,931,498	47,846,812
Total			**4,418,680,833**

Annex - 5

Initial and Final Merged Indicators

Note: A detailed list of 39 indicators was developed after the initial engagements, resulting in over 100 questions in the survey. In order to obtain quality responses, fewer questions were asked. Therefore, the 39 indicators were merged into 11. The complete list of initial indicators and final merged indicators is presented below.

Initial Indicators	Input
1.*Increased community spirit* 2.*Increased transparency in community institutions* 3. *Increase in leadership skills* 4. *Increased social wellbeing*	1) *Increase in community ownership*
5.*Information sharing increased* 6.*Increased knowledge about the working of government, therefore, more access to government schemes* 7. *Reduction in drop-outs and increased importance given to higher education*	2) *Increase in sense of social security*
8.*Enhanced relationships at home and with society* 9.*Improvement in economic independence and working hours increased* 10.*Increased confidence*	3) *Increase in women empowerment*
11. *Enhanced agriculture sustainability due to increased dependence on harvested water and bio-fertilisers* 12. *Increased land availability* 13. *Increased health of crop and cattle* 14. *Reduction in the total cost of agriculture* 15. *Increase in total production*	4) *Increase in sustainable agriculture practices*
16.*Reduction in the exploitation of natural resources* 17.*Protection of soil quality* 18.*Redcution in the usage of chemical inputs* 19.*Reduction in water expenditure*	5) *Increased ecological security*
20. *Increased consumption of safe and cost-effective water* 21. *Improvement in the quality of women's daily life* 22. *Increased nutritional intake* 23. *Improvement in learning outcomes* 24.*Improved family and neighbour relations* 25.*Increased working days and earning opportunities*	6) *Reduction in illness*
26. *Increase in income from agriculture and agri-allied sources* 27. *Reduction in migration* 28. *Improved access to formal credit* 29. *Reduction in debt*	7) *Increase in financial security*
30. *Increase in water availability for agriculture* 31. *Increase in rainwater harvesting* 32. *Safe use of natural resources*	8) *Increase in water security*
33. *Increased ability to spend on children's education* 34. *Increased ability to purchase clothes when needed* 35. *Purchase of vehicles for personal/professional use*	9) *Increase in household expenses*
36. *Receipt of the proper price for the produce* 37. *Reduction in exploitation by middlemen* 38. *Reduction in the cost of sale of harvested produce*	10) *Increased satisfaction in the sale of agricultural produce*
39. *Increased availability of quality agricultural input at a cheaper rate*	11) *Increased satisfaction in the purchase of agricultural input*

Annex - 6

Externalities and Financial Proxy Values

For a detailed account of externalities, please refer to this link.

All other related documents.

Annex - 7

Sensitivity Analysis and Discounting Rate

Sensitivity allows for a reasonable assumption of over and under estimates, resulting in the most likely range of impact achieved by the programme. The assumptions being offset include sample and valuation bias and externalities.

The undertaking of a sensitivity analysis provides a range of what the impact would have been in case of easing external factors to reach a higher range and by using extremely stringent values to reach a lower range.

High Sensitivity (Low Range)

Indicator of Change	Externality	Baseline	Adjusted	Logic
Increase in water security	*Attribution*	*0% weight to naturally available water*	*0% weight to naturally available water*	*To acknowledge that water security can be simply achieved due to naturally available water and may not be credited to any organisation/person in particular in this case*

Low Sensitivity (High Range)

Initial Indicators	Input Cost	Adjusted	Logic
Time invested by stakeholders in the programme	*Total days spent by the stakeholders on the programme = 50 days*	*Total days spent by the stakeholders on the programme = 39 days*	*To account for only the days spent doing manual labour by the stakeholders, since the total days are multiplied by the labour wages to get the final value for the time invested by the stakeholders*

Discounting Rate

Reasoning for the 6% discounting rate:
The theoretical basis of the social rate is the opportunity cost of public sector investment (in terms of the rate of return to the marginal private sector projects forgone).Following the research Journal, 'Estimation of a Social rate of Interest for India' by Erhun Kula that estimates a social discount rate in India for the purpose of economic evaluation of investment projects, such as those aimed at improving the nation's agricultural or social performance, the discount rate has been fixed. S = eg + m where S is social discount rate and the component parameters of this rate are: the growth rate of per capita consumption in real terms(g), the elasticity of the marginal utility of consumption(e) and the mortality-based or pure time discount rate(m). Based upon time series data, the overall figure turns out to be 6.03(6% approx.)