

# **SOCIAL IMPACT ASSESSMENT REPORT** INTEGRATED RURAL DEVELOPMENT

# CONTENTS

<b>Abbreviations</b>	<b>01</b>
<b>Chapter 2   Executive Summary</b>	<b>02 - 06</b>
Project Background	02
Major Project Activities	02
Research Methodology	03
Stakeholders Covered	03
Major Findings of the Study	04 - 06
<b>Chapter 3   Introduction</b>	<b>07 - 09</b>
The Project Goal	07
Project Rationale	07
About the National Payments Corporation of India (NPCI)	08
CST at NPCI	08
About the Implementing Partner TCF	08
Project Objectives	08 - 09
About the Study	09
<b>Chapter 4   Research Methodology</b>	<b>10 - 13</b>
Introduction	10
Research Objectives	10
The Mixed Methods Approach	11
Application of Quantitative Techniques	11
Application of Qualitative Techniques	11
Ensuring Triangulation	11
Descriptive Research Design	11
Sampling Methodology	11
Sampling Framework	12
Stakeholders Covered	12
Commitment to Research Ethics	13
<b>Chapter 5   IA of Natural Resource Management Activities</b>	<b>14 - 54</b>
Section 5.1 Crop Raiding Prevention Torches	14 - 18
Section 5.2 Energy Efficient Stoves	19 - 22
Section 5.3 Street Solar Lights	23 - 25
Section 5.4 Capacity Building of Forest Department Frontline	26 - 27
Section 5.5 Jal Minar	28 - 30
Section 5.6 Livelihood Promotion	31 - 35
Section 5.7 Livelihood Promotion Activity - Vermicomposting	36 - 37
Section 5.8 Livelihood Opportunities for the youth	38 - 39
Section 5.9 Remedial Coaching Classes	40 - 41
Section 5.10 K yan Intervention	42 - 44
Section 5.11 Infrastructure Strengthening in Schools	45 - 48
Section 5.12 Supply of educational kits to needy students	49
Section 5.13 Anganwadi Strengthening	50 - 52
Section 5.14 Conservation Education	53 - 54
<b>Chapter 6   OECD Framework</b>	<b>55 - 57</b>
<b>Chapter 7   Recommendations</b>	<b>58 - 59</b>
<b>Chapter 8   Conclusion</b>	<b>60</b>

## 01. ABBREVIATIONS

<b>IRD P</b>	Integrated Rural Development Project
<b>NPCI</b>	National Payments Corporation of India
<b>TCF</b>	The Corbett Foundation
<b>EE Stoves</b>	Energy efficient stoves
<b>FY</b>	Financial Year
<b>SDGs</b>	Sustainable Development Goals
<b>UTI</b>	Urinary Tract Infections
<b>NRM</b>	Natural Resource Management
<b>LPG</b>	Liquified Petroleum Gas
<b>VDC</b>	Village Development Committee
<b>SHG</b>	Self Help Group
<b>CSR</b>	Corporate Social Responsibility
<b>RBI</b>	Reserve Bank of India
<b>IBA</b>	Indian Banks' Association
<b>NGO</b>	Non-Governmental Organisation
<b>Z.P.</b>	Zilla Parishad

## 02. EXECUTIVE SUMMARY

### Project Background

National Payment Corporation of India, NPCI, executed the Integrated Rural Development Project (IRDP) across 15 villages in the Amboli region, Sawantwadi taluka, Sindhudurg district, Maharashtra, during the financial years 2021-22 and 2022-23. The project was implemented through the project partner, The Corbett Foundation (TCF).

The IRDP sought to promote all-encompassing rural development in the Amboli Dodamarg Conservation Reserve, situated in the Sawantwadi block of the Sindhudurg district.

The major components of the program were



Education



Livelihood promotion



Water and Sanitation



National Resource Management



Conservation education and awareness generation

The project villages in the Amboli-Dodamarg Conservation Reserve, integral to the Western Ghats, are prone to frequent man-animal conflicts, having serious implications on the safety and livelihood of the community members. The IRDP, a pioneering effort in this area, was launched to create all-round development and enduring impacts in the lives of over 15,000 individuals in the project villages.

### Major Project Activities



Provision of Energy Efficient Stoves



Provision of Crop Raiding Protection Torches



Installation of Solar Fencing



Installation of Solar Street lights



Livelihood promotion activities for women and youth



Infrastructure strengthening of Schools and Anganwadis



Training for Forest Department Officials



K-Yan for Digital Learning Experience of students



Supply of Educational Kits



Environmental Education and Awareness Generation



### Year of Implementation

FY 2021-22, 2022-23



### Assessment Year

FY 2023-2024



### Beneficiaries

15,000



### Project location

Amboli region, Sawantwadi taluk, Sindhudurg, Maharashtra.



### Total cost of the project

₹3,00,19,988



### SDG Goals



## Research Methodology



### Research Approach

Mixed Approach



### Sampling Methodology

Purposive Sampling



### Research Design

Descriptive design



### Sample Size

467

## Stakeholders Covered



Officials of  
the Forest  
Department



School  
Teachers



Anganwadi  
Teachers



Community  
Leaders



Parents of  
students  
studying in  
schools



Parents of  
children in  
Anganwadis



NGO staff

## STUDENTS LEARNING THROUGH K-YAN, AT MALWADI SCHOOL



# Major Findings of the Study

## Key Impact of Crop Raiding Protection Torches



**82.0%**

of the beneficiaries reported a reduction in crop raiding to a large extent.



**78.0%**

of beneficiaries reported a saving of crops to a larger extent.

## Key Impact of Energy Efficient Stoves



**98.0%**

of the beneficiaries reported a drastic reduction in smoke emanation, which is characteristic of traditional chulhas.



**98.0%**

of the beneficiaries reported a significant reduction in cooking time.



**88.0%**

of the beneficiaries reported a 50% decrease in the consumption of firewood/charcoal/crop residues.



**94.0%**

of the beneficiaries reported a 60% reduction in the use of kerosene to light up the firewood/charcoal used in stoves.

## Key Impact of Solar Street Lights



**88.0%**

of the beneficiaries reported a feeling of safety and security to venture out in the proximity of their houses, which was not possible earlier.



**78.0%**

of the beneficiaries reported reduced threat from anti-social elements and reduced risk of property damage, as well as theft of livestock and agricultural produce.

## Key Impact of Solar Fencing



**76.0%**

of the beneficiaries reported a reduction of crop loss to a large extent post-erection of solar fencing due to reduced animal incursions.



**74.0%**

of the beneficiaries were relieved from mental distress and frustration due to crop loss prevention.

## Key Impact of Jal Minar



**100.0%**

of the beneficiaries reported a reduction in instances of waterborne diseases.



**100.0%**

of the beneficiaries reported reduced physical strain due to reduced distance to fetch water.



**96.7%**

of the beneficiaries had a sense of water security due to an assured supply of drinking water from Jal Minar.



**100.0%**

of the beneficiaries were able to complete their household chores earlier due to water availability.

## Key Impact of Livelihood promotion activity for women



**100.0%**

of the women beneficiaries had improved self-confidence and belief in personal capabilities due to involvement in Income generation activities.



**100.0%**

of the women beneficiaries reported their ability to take part in family decision-making processes.



**100.0%**

of the women beneficiaries felt that their status improved in their family with better recognition and respect from family members.



**100.0%**

of the women beneficiaries expressed their happiness in their ability to independently provide for their children's needs.

## Key Impact of Vermicomposting: Improvement of Soil Health



**80.0%**

of the beneficiaries reported enriched soil with organic matter due to the use of vermicompost.



**90.0%**

of the beneficiaries reported a substantial reduction in the use of chemical fertilizers.



**80.0%**

of the beneficiaries reported an increased yield between 15% to 25%.

## Key Impact of Remedial classes



**100.0%**

of the students shared that remedial classes helped them to score better marks than before.



**100.0%**

of the students reported an improvement in their mathematics scores, besides improvement in scores in other subjects, compared to pre-intervention.



**100.0%**

of the students achieved better clarity on concepts and formulas, enabling them to follow simple steps in mathematics with increased ease.

## Key Impact of K-Yan



100.0%

of students felt that K-yan classes were more interesting than regular classes.



100.0%

of the students were able to understand the concepts better due to simpler and interactive presentations.



100.0%

of the students spent more time in studies compared to pre-intervention.



100.0%

of the students were able to score more marks in exams compared to pre-intervention.

## Key Impact of Toilet Renovation



80.0%

of the parents reported improved hygiene and sanitation for their children studying in the schools post-intervention.



70.0%

of the parents reported reduced U.T. infections and other contagious diseases post-intervention.



70.0%

of the teachers noted there was an improvement in student attendance post intervention as there was reduced absenteeism, owing to better health of students.

## Key Impact of supply of educational materials



90.0%

of the parents of students expressed that the receipt of educational kits has improved their children's access to essential school stationeries and books.



90.0%

of the parents felt that the interventions had reduced their financial burden towards buying these essential school supplies to a larger extent.



80.0%

of the teachers felt the availability of stationery items created a better learning environment for the students both at school and at home.

## Key Impact of the Anganwadi Renovation



80.0%

of the parents expressed that their children now exhibit heightened interest in attending Anganwadi every day compared to earlier.



70.0%

of the teachers have noted that due to the improvements in the Anganwadi, parents are now more interested in enrolling their children.



## CHAPTER 3

### INTRODUCTION



*FGD with Sajari Mahila Kathya Udyog*

The National Payment Corporation of India (NPCI) launched the Integrated Rural Development Project (IRDP) in the 15 identified project villages of Amboli region, taluka Sawantwadi, district Sindhudurg of Maharashtra, to be implemented through its project partner, The Corbett Foundation (TCF). The IRDP encompasses five major components aimed to bring about the all-round development of rural communities, namely, Livelihood, Education, Natural Resource Management/Conservation (NRM), Water & sanitation, and Awareness Generation & Conservation Education.

The 15 project villages chosen for the intervention were Amboli, Chaukul, Danoli, Devsu, Fanasvade, Gele, Kegad, Kesari, Khadpade, Kumbhvade, Masure, Nene, Ovaliye, Parpoli and Sarmale, in which 13914 people benefitted.

### THE PROJECT GOAL

The IRDP project envisages holistic nature conservation through livelihood generation, better education and awareness and sustainable rural development.

### PROJECT RATIONALE

Sustainable rural development becomes possible only if the entire community is actively engaged in identifying and addressing issues by itself, facilitated by an internal or external agency. Timely interventions are capable of mitigating challenges faced by the community.

As these communities are located in the backdrop of a reserve forest, where frequent man-animal conflicts are rampant, promoting the development of the communities without disturbing the balance of the ecosystem is crucial. This is dependent on harmonious co-existence between man and wildlife. The Integrated Rural Development Project, by adopting a holistic and coordinated approach to address economic, social, and environmental dimensions concurrently, aiming for inclusive growth, poverty reduction, and enhanced quality of life in rural areas, has the potential to bring about all-round development of the rural communities.

## ABOUT THE NATIONAL PAYMENTS CORPORATION OF INDIA (NPCI)

National Payments Corporation of India (NPCI), an umbrella organisation for operating retail payments and settlement systems in India, is an initiative of the Reserve Bank of India (RBI) and the Indian Banks' Association (IBA) under the provisions of the Payment and Settlement Systems Act, 2007, for creating a robust Payment & Settlement Infrastructure in India.

Considering the utility nature of the objects of NPCI, it has been incorporated as a "Not for Profit" Company under the provisions of Section 25 of the Companies Act 1956 (now Section 8 of the Companies Act 2013), to provide infrastructure to the entire Banking system in India for physical as well as electronic payment and settlement systems.

## CSR AT NPCI

NPCI, in its role as a socially responsible corporate citizen, tries to foster sustainable community development by supporting and implementing projects for marginalized sections of society and creating positive differences in their lives.

NPCI is committed to creating sustainable, scalable and replicable solutions for some of India's most pressing social challenges. Through its partnerships with leading social development sector organizations, the organisation works towards improving the lives of the community we touch.

## ABOUT THE IMPLEMENTING PARTNER TCF

The Corbett Foundation (TCF) was established on April 22, 1994 by late Mr. Dilip D. Khatau and Mrs. Rina Khatau, as a non-profit organisation with a mission to strive for a harmonious coexistence between humans and wildlife. With an overarching goal 'think globally and act locally'. Our interventions have been carefully aligned to contribute towards the Sustainable Development Goals. TCF's wide array of work such as ecological research, biodiversity conservation, human-wildlife conflict mitigation, habitat restoration, sustainable livelihoods,

watershed development, sustainable rural development, human and veterinary health, policy and advocacy have impacted several threatened species in important conservation landscapes and providing small but significant contributions to India's commitment to mitigate the negative impacts of climate change.

## PROJECT OBJECTIVES

The following are the objectives of the IRDP project.



Understanding the dependency of local communities on natural resources.



Understanding issues associated with human and wildlife interface.



Implement mitigation measures for ensuring the peaceful co-existence of local community and wildlife.



Sustainable management of water resources.



Healthy livestock management.



Preventing crop-damages/losses caused by wild animals.



Conservation education and awareness generation for long-term environmental sustainability.



Capacity building of the forest department's frontline staff.



Livelihood generation for unemployed youths and local self-help groups.



Provide support to economically disadvantaged and academically weaker students.



Strengthening of local schools and anganwadis for the overall development of children.

## KIT FOR FOREST DEPARTMENT



## ABOUT THE STUDY

The National Payments Corporation of India (NPCI) commissioned SoulAce, a third-party agency specialising in Social Impact Assessments, to evaluate the immediate and enduring impacts of the IRDP program implemented through its project partner, The Corbett Foundation (TCF) for the Financial year 2021-22 and 2022-23.



**WATER TANK UNDER JALMINAR PROGRAM**

## CHAPTER 4

### RESEARCH METHODOLOGY



#### OPEN WELL FENCING AT SARMALE VILLAGE

#### INTRODUCTION

Research involves a methodical and logical exploration of pertinent information within a subject matter, adhering to time-tested scientific principles to eliminate bias and subjectivity. Social Science Research emphasizes rigorous methodologies, ensuring objectivity, ethical neutrality, reliability, testability, and transparency, distinguishing it from speculative or assumption-based approaches. The process begins with identifying the research problem, refined through literature reviews or consultations with experts. The research problem is then narrowed down into measurable aspects, with objectives, research and sample design, and data collection instrument decisions made. A well-defined methodology is essential to guide the research, anticipating and addressing potential issues while staying focused on the objectives.

This research study was commissioned by the National Payments Corporation of India (NPCI) to assess its CSR intervention in the Integrated Rural Development Project (IRDP) implemented through its project partner, The Corbett Foundation (TCF) at Amboli region, Sawanwadi Taluk, Sindhudurg District, Maharashtra during the financial year 2021-22 and 2022-23.

#### RESEARCH OBJECTIVES



To assess the impact of the CSR activities under the Natural Resource Management Intervention among the beneficiaries in the project communities.



To study the impact of the Jal Minar initiative on the availability of clean drinking water among the beneficiaries.



To evaluate the impact created by livelihood promotion activities among various beneficiary groups of women and youth in the project communities.



To assess the impact of the strengthening of the education system in the project villages through interventions in schools and Anganwadi.



To understand the impact of awareness generation and conservation education on students in the project villages.

## USE OF MIXED METHODOLOGY FOR MAXIMUM INSIGHTS

The research aimed to evaluate the effects of various components of the Integrated Rural Development Program (IRDP), encompassing initiatives in areas such as Natural Resource Management, Livelihood promotion, Education, nature conservation, and awareness generation. These interventions have resulted in significant and nuanced impacts at the individual, group, and community levels, necessitating a comprehensive understanding through engaging with beneficiaries using diverse probing techniques. Some of these probing techniques were quantitative, and some were qualitative. The use of both these methods helped complement the results from each other.

## APPLICATION OF QUANTITATIVE METHODS

In instances where the research involved engaging with a substantial number of beneficiaries, such as those receiving Energy Efficient stoves, Crop raiding prevention torches, clean drinking water through Jal Minar, Income generating activities for women, remedial classes for students, etc., Quantitative techniques were applied to present the findings in a precise, numerical format.

## APPLICATION OF QUALITATIVE METHODS

In situations where the study required a thorough investigation and understanding of subtle nuances that could not be uncovered through multiple-choice questions, qualitative methodologies were employed. Tools such as Focus Group Discussions, In-depth interviews, and interactions with key stakeholders were utilized to comprehend the impact at the community level, highlight successful cases of entrepreneurship among youth and women, and present unique instances across various interventions.

## ENSURING TRIANGULATION

Triangulation is essential to enhance the credibility and validity of research findings, serving as a measure to ensure the trustworthiness of the research process. The insights derived from Quantitative research findings have been cross-validated through Qualitative research, and the report has been prepared after due verification.

## DESCRIPTIVE RESEARCH DESIGN

As the study is intended to portray the status quo of the IRDP project and not to find the causal relationship between variables or explore new phenomena altogether, the study has adopted a descriptive research design. This design is suitable for describing the impact of the multiple dimensions of the IRDP intervention.

## SAMPLING METHODOLOGY

The research employed a purposive sampling method, selecting participants who possessed specific knowledge about the subject matter under investigation and competence in addressing the research questions. This approach was justified by the need to ensure that only beneficiaries who were well aware of the intricacies of the particular dimension of the Integrated Rural Development Program (IRDP) intervention were included in the study.

By focusing on participants with relevant expertise, the research aimed to gather targeted and meaningful insights, thereby enhancing the overall quality and relevance of the findings.

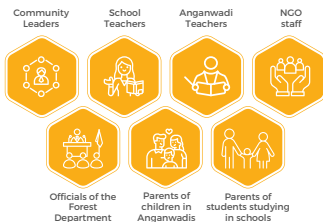
## SHG COIR MAKING



## SAMPLING FRAMEWORK

INTERVENTION	QUANTITATIVE STUDY	QUALITATIVE STUDY
 Crop Raiding protection torches	50	10
 Solar Fencing	NIL	10
 Solar Street lights		10
 Energy Efficient Stoves	50	10
 Training for Forest Department officials		07
 Jal Minar	30	10
 Income Generating Activity for Women	50	10
 Vermicomposting	NIL	10
 Poultry Farming	NIL	05
 Remedial classes	50	20
 K-yan	40	10
 Distribution of Educational Kits	NIL	30
 Anganwadi strengthening	NIL	15
 Conservation Education	30	10

## STAKEHOLDERS COVERED



## COMMITMENT TO RESEARCH ETHICS



### Informed Consent

The study strictly adhered to the principles of informed consent. Participants were provided with comprehensive information about the study's objectives, procedures and potential risks and benefits. They were given the opportunity to ask questions and make an informed decision about their participation.



### Confidentiality and Privacy

Measures were taken to ensure the confidentiality and privacy of participants. Data collected was kept secure and only accessible to authorized personnel. Participant identities were protected, and any personal information was anonymized or coded to maintain confidentiality.



### Voluntary Participation

Participation in the study was entirely voluntary, and participants had the freedom to choose whether or not to participate. There was no coercion or pressure exerted on individuals to take part in the study.



### Ethical Treatment

Participants were treated with respect, dignity and fairness throughout the study. Their well-being and rights were prioritised, and they were provided with any necessary support or assistance.

## TCF TEAM MEMBERS INTERACTING ON NATURE EDUCATION WITH SCHOOL STUDENTS



## CHAPTER 5

### IMPACT ASSESSMENT OF NATURAL RESOURCE MANAGEMENT ACTIVITIES



#### SECTION 5.1

##### Crop raiding prevention torches



*Beneficiaries displaying the crop raiding prevention torches received from project.*

#### 5.1.1 CROP-RAIDING-PREVENTION TORCHES

Paddy and finger millet are the primary crops for subsistence farming in the project area, supplemented by cash crops such as sugarcane and cashew. Villagers also grow vegetables and rabbi crops in areas with perennial water supply.

Situated in the Sahyadris, the proximity to forests exposes the crops to frequent damage by wild animals like boars, deer, and gaur, occasionally encountering elephants in Amboli. This poses a significant threat to subsistence farming, leading to food security concerns for families. The repeated crop raids fostered a hostile attitude towards both wild animals and the forest department. Despite individual attempts to prevent animal infiltration, the communities endured ongoing suffering and grievances.

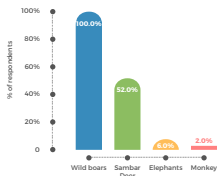
Recognizing the community's persistent need, NPCI, through its implementing partner, initiated a CSR intervention by providing crop-raiding prevention torches to farmers in the project communities of Amboli. This section discusses the scenario of the project communities before and after the supply of crop-raiding prevention torches and its key impact.



## 5.1.2 MAJOR FINDINGS

### PRE-INTERVENTION SCENARIO

CHART 1: ANIMALS DUE TO WHICH CROP RAIDING/DAMAGES FACED IN THE PAST



Beneficiaries experienced crop raiding by more than one wild animal species before the receipt of anti-crop raiding prevention torches.

All the beneficiaries shared damage to crops by wild boars, while 52% of the beneficiaries reported crop damage by sambar deer, too.

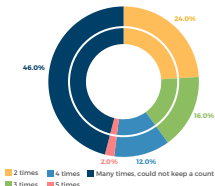


6.0%

of the beneficiaries reported the raiding of crops by elephants and 2% by monkeys.

## 5.1.3 FREQUENCY OF CROP RAIDS

CHART 2: NO. OF TIMES IN 5 YEARS SUFFERED CROP DAMAGES BEFORE THE USE OF CROP RAIDING TORCHES



The majority of the beneficiaries (46%) reported that the crop raids happened many times in the 5 years before the intervention, and they could not keep a count of the number of times they happened.



24.0%

of the beneficiaries reported crop raids at least 2 times, while 16% reported crop raids at least 3 times during the above period.

Some farmers reported crop raids 4 to 5 times during the 5 years before the intervention.

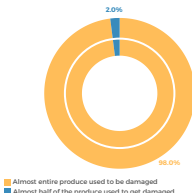
Each time of crop raid led to a trail of destruction and a sense of irrevocable loss among the affected farmers.

## CEMENT DAM AT DEVASU GP,



### 5.1.4 EXTENT OF CROP DAMAGE SUFFERED EARLIER

CHART 3: EXTENT OF CROP DAMAGE SUFFERED EARLIER



The overwhelming proportion of beneficiaries (98%) reported that almost all the produce used to be damaged before the usage of anti-crop raiding torches.



**2.0%**

of the beneficiaries shared that almost half of their produce used to get damaged earlier.



Many farmers recounted tales of crop raiding that happened because of wild boars and sambar deer on their fully grown rice crops and accounts of emotional distress long endured by them before the intervention.



Each crop raid led to significant financial losses, reduced income, and default in debt payments.



Many farmers narrated how their livelihoods were disrupted and how it led to heightened stress and anxiety among them.



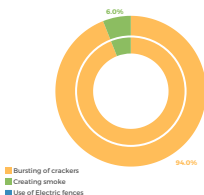
Farmers shared that loss of crops not only impacted their sale of crops but also the availability of food for their own consumption.



Many of the farmers described how the economic setback due to crop loss created frustration and loss of hope in continuing agriculture before the intervention.

### 5.1.5 MEASURES TAKEN TO WARD OFF ANIMAL RAIDS IN THE PROJECT COMMUNITIES

CHART 4: MEASURES TAKEN BY THE COMMUNITY MEMBERS TO WARD OFF ANIMAL RAIDS BEFORE THE CROP RAIDING PREVENTION TORCHES



A majority of the beneficiaries resorted to bursting crackers (94%), and the rest shared that they created smoke to ward off wild animals.

Casual conversations with the beneficiaries revealed a few members of the community also used to erect electric fences for the purpose in the past, but such instances were rare.

### 5.1.6 MORE THAN ONE MEMBER OF THE FAMILY KEPT VIGIL THROUGH THE NIGHT



## 44.0%

of the beneficiaries reported 3 members in their family used to keep night vigil against animal raids, while an equal proportion of beneficiaries reported at least 2 members of their family staying vigilant through the night to prevent animals from raiding their crops.

A few respondents (12%) only shared that one member of their family used to keep a night vigil.

## “

**Rajendra Kumar Gavde, 45 years old, resides at Bharadwadi Hamlet of Fansavade village.** He says, 'Earlier, I used to face huge crop loss due to incursion of wild animals like bison, monkeys, wild Boars, and Sambhar deer. I used firecrackers to drive them away.

But after the intervention of TCF, they provided me and other villagers with crop-raiding protection torches so that at night, we didn't have to use firecrackers to ward off animals. The range of the Torch beam goes very far, and it is very bright. Wild animals get scared and run away. So, it has substantially reduced our crop loss, but somebody had to be there on the farm to take care of the crops with the torch in the night. Monkeys used to visit the fields in the daytime, and we have other means to drive them away.

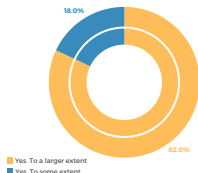


Due to the crop-raiding protection torches, we have been able to control animal raids effectively, and crop loss has been substantially reduced. I am thankful to NPCI and TCF for this support to farmers.'

## ”

### 5.1.7 KEY IMPACT: REDUCTION OF CROP RAIDS

CHART 5: LEVEL OF REDUCTION IN THE FREQUENCY OF RAIDING OF CROPS BY ANIMALS AFTER THE USE OF TORCHES

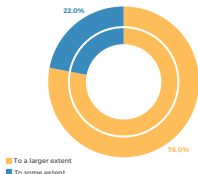


## 82.0%

of the beneficiaries shared that crop raiding has been reduced to a large extent after the use of anti-raiding torches.

### 5.1.8 KEY IMPACT: SAVING OF CROPS TO A LARGE EXTENT

CHART 6: EXTENT TO WHICH THE CROP PRODUCED SAVED/ PROTECTED AFTER THE USE OF THE TORCHES



## 78.0%

of the beneficiaries reported a saving of crops to a larger extent because of a reduction in the frequency of animal raids.

The rest agreed that crop savings were realised to some extent.

### 5.1.9 LEVEL OF SATISFACTION WITH THE CROP RAIDING PREVENTION TORCHES

CHART 7: LEVEL OF SATISFACTION WITH THE CROP ANTI RAIDING TORCHES

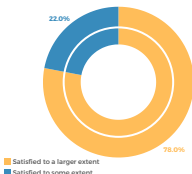
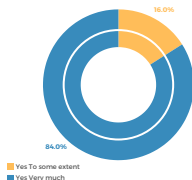


CHART 8: WHETHER RECOMMEND THE USE OF TORCHES TO THE NEIGHBOURS?



**78.0%**

of the beneficiaries expressed their satisfaction with the crop-raiding torches to a larger extent.

The rest were satisfied to some extent.



**84.0%**

of the beneficiaries shared that they would recommend the other farmers in the community, too, to use the crop-raiding prevention torches to a larger extent, indicating their satisfaction with the efficacy of the crop-raiding prevention torches.



**SOLAR STREET LAMP, AT KESARI**



## SECTION 5.2

### Energy Efficient stoves

The 15 project villages, owing to their proximity to forests, heavily depend on forests for firewood. Even households with LPG cylinders continue to favour traditional chulhas due to economic challenges in affording the cost of LPG refills.

To mitigate the reliance of community members on forests for firewood and as a conservation strategy, NPCI with TCF introduced EE stoves among the families below the poverty line in the project villages. This measure has resulted in families transitioning to EE stoves from traditional chulhas.

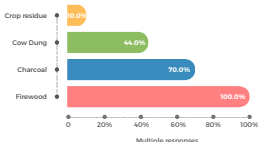
This section discusses the scenario of the project villages before and after the introduction of EE stoves and the key impacts realised.

## ENERGY-EFFICIENT STOVE IN USE



### 5.2.1 PRE-INTERVENTION SCENARIO

**CHART 9: COOKING FUEL USED BEFORE SUPPLY OF ENERGY EFFICIENT STOVES**



Before adopting energy-efficient stoves, all beneficiaries utilized a combination of cooking fuel sources, with 100% relying on firewood as their primary fuel.



**70.0%**

of the beneficiaries reported using charcoal for cooking.

Cow dung served as a cooking fuel for 44% of the beneficiaries, while a small percentage (10%) utilized crop residue for this purpose.



Given the geographical terrain of the Sahyadris inhabited by the beneficiaries, firewood and charcoal stand out as easily accessible fuel sources. However, their excessive use has adverse environmental effects and contributes to respiratory problems.



Despite cow dung and crop residue being more sustainable options that reduce waste, they present significant challenges in terms of efficiency and comfort compared to contemporary cooking fuels.



The distribution of energy-efficient stoves by NPCI is an appropriate solution not only to address the needs of the beneficiaries but also to provide an environmentally viable alternative.

## 5.2.2 BENEFICIARIES AWARENESS OF THE BENEFACITOR

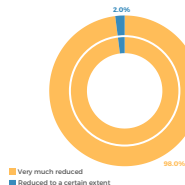
It is heartening to note that all the beneficiaries (100%) were able to name NPCI and TCF as the suppliers of energy-efficient stoves.



*Distribution of Energy Efficient chulha to the beneficiaries*

## 5.2.3 KEY IMPACT: REDUCED SMOKE RESULTING IN LESSER RESPIRATORY ILLNESSES

**CHART 10: EXTENT OF REDUCTION IN SMOKES FROM EE STOVES THAN CHULHAS USED EARLIER**



**98.0%**

of the beneficiaries reported that the smoke that used to emanate from traditional chulhas has drastically reduced.

### IMPROVED AIR QUALITY



A noteworthy observation from the study was the reduction in smoke production during cooking.



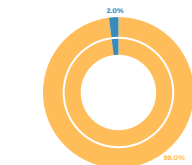
Beneficiaries reported that the energy-efficient stoves produced less smoke compared to traditional stoves, contributing to improved indoor air quality.



The reduction in smoke emissions is particularly crucial for mitigating respiratory issues, as evidenced by beneficiaries' feedback on decreased breathing difficulties.

## 5.2.4 KEY IMPACT: REDUCED COOKING TIME

CHART 11: EXTENT OF REDUCTION IN THE COOKING TIME BECAUSE OF USING EE STOVES



Very much reduced  
Reduced to a certain extent



**98.0%**

of the beneficiaries reported a significant reduction in cooking time with the use of EE stoves.

The faster completion of cooking activities not only brought relief to the beneficiaries but also enabled them to allocate the saved time to more productive activities.

### ENHANCED EFFICIENCY



Beneficiaries reported that the stoves performed exceptionally well in various cooking activities, including the preparation of traditional dishes such as Bhakri and millet.



Apart from the major benefits of reduction in firewood usage, cooking times were reported to be either significantly reduced or reduced a little bit.



Only one user reported that the cooking time was almost the same for either traditional chulhas or EE stoves.

However, the general consensus among users was that the stoves were efficient and effective in meeting their cooking needs.

## 5.2.5 REDUCTION IN THE USE OF NON-RENEWABLE ENERGY SOURCES

CHART 12: PERCENTAGE REDUCTION IN USE OF FIREWOOD/ CHARCOAL AFTER USING EE STOVES

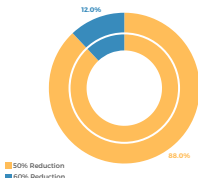
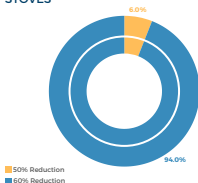


CHART 13: PERCENTAGE REDUCTION IN USE OF KEROSENE TO LIGHT UP THE FIREWOOD AFTER USING EE STOVES



50% Reduction  
60% Reduction

## 5.2.6 REDUCED USE OF FIREWOOD/ CHARCOAL



**88.0%**

of the beneficiaries reported a 50% decrease in the consumption of firewood or charcoal for cooking upon adopting energy-efficient stoves.

Furthermore, 12% of the beneficiaries noted a substantial 60% reduction in the utilization of firewood or charcoal as cooking fuel.

### 5.2.7 REDUCED USE OF KEROSENE



**94.0%**

of the beneficiaries observed a 60% reduction in the use of kerosene to light up the firewood/charcoal used in stoves.



**6.0%**

of the beneficiaries shared a 50% reduction in the use of kerosene.

The above findings suggest improved fuel efficiency realised through the use of EE stoves, with potential for environmental benefits and reduced reliance on non-renewable sources. These also indicate the practical effectiveness of EE stoves in promoting sustainable and resource-efficient cooking practices among beneficiaries.

### COOKING EFFICIENCY AND REDUCED FIREWOOD CONSUMPTION



One of the most prominent advantages of energy-efficient stoves is their ability to significantly reduce the consumption of firewood. The study revealed that users experienced a remarkable 50% reduction in the amount of firewood needed for their daily cooking needs.



The study indicates the practical effectiveness of EE stoves in promoting sustainable and resource-efficient cooking practices among beneficiaries.



The study sheds light on the potential of EE stoves in reducing reliance on non-renewable sources, which benefits the environment and helps in forest conservation efforts.

### 5.2.8 OVERALL BENEFICIARIES' SATISFACTION

The beneficiaries expressed a high level of satisfaction with the energy-efficient stoves.

A majority of respondents affirmed that they were very much satisfied with the performance of the stoves, citing reduced firewood consumption, improved cooking efficiency, and enhanced respiratory health as key factors contributing to their satisfaction.

The absence of significant challenges further reinforced the effectiveness of the energy-efficient stoves in meeting beneficiaries' needs.



**ENERGY EFFICIENT STOVE BEING USED**





## SECTION 5.3

### Street solar lights

To provide illumination of village roads and pathways at night, NPCI, in collaboration with TCF, installed 75 street solar lights in 13 villages to benefit 3185 individuals. These solar streetlights have instilled a sense of safety among the villagers from accidental encounters with wildlife and anti-social elements.

#### 5.3.1 REDUCING ACCIDENTAL ENCOUNTERS WITH WILDLIFE



### 88.0%

of the beneficiaries interacted during the study revealed that the installation of the solar lights provided sufficient illumination during nighttime and gave them a feeling of safety and security to venture out in the proximity of their houses, which was not possible earlier.

Previously, there were occurrences of wild animals venturing near residential areas during the night, causing unease among community members who were reluctant to venture outside after dark. The installation of solar lighting has successfully deterred animals from approaching, ensuring a safer environment for residents.

#### 5.3.2 ENHANCED COMMUNITY SECURITY



### 78.0%

of the beneficiaries revealed that the availability of lighting has also kept anti-social elements at bay, consequently diminishing the risk of property damage and theft of livestock and agricultural produce.



#### SOLAR FENCING WAS ERECTED ON THE FARMLAND OF A BENEFICIARY

Crop raiding and damage are regular occurrences in the project villages. NPCI-TCF erected solar fencing on the farmlands of beneficiaries based on the criteria of their socio-economic backwardness. Solar fences were erected for about 1.3 km in Mharati Beradkiwadi, Masure village and 1.5 km in Gaduduwadi, Amboli village, for the purpose of protecting crops. This initiative benefitted farmers belonging to 40 households.



## **Case Study: Mitigating Crop Loss through Solar Fencing Intervention**

The project villages located in the scenic backdrop of the dense forest of Sahyadris faced perpetual conflict between humans and wildlife, posing significant challenges to farmers' livelihoods. Each instance of wildlife incursion on farmlands caused havoc, destroying the entire produce of poor farmers waiting for harvest, causing immense distress and frustration. The absence of surveillance mechanisms and insurance cover for crop loss exacerbated the detrimental impact of animal raids. There were instances where a single night's incursion led to losses of up to 2 tons of sugarcane. Some farmers even gave serious thought to abandoning the pursuit of agriculture forever.

To address this persistent problem of the community members, NPCI and TCF erected solar fencing in the farmlands of deserving farmers in Gadudawadi, Amboli. The installation of solar fencing came as a huge relief to the farmers who battled with the problem of crop-raiding animals for a long. Beneficiaries who interacted during the study expressed that solar fencing is proving to be an effective deterrent against wildlife intrusion.

One farmer happily shared a harvest of 84 tons of sugarcane, yielding a gross income of as much as 2.5 Lakhs. Many farmers narrated instances of good yield and crops protected from animal raids after the erection of solar fencing.

This measure has rekindled the hope of the farmers to reclaim their livelihood and sustain their agricultural practices.



## 5.3.3 KEY IMPACT

### Key Impact of solar fencing

**76.0%**

of the beneficiaries shared that crop loss has largely been reduced post-erection of solar fencing.



### Relief from Mental Agony

**74.0%**

of the beneficiaries expressed that they were relieved from mental distress and frustration, which they had been suffering for a long time.



### Revival of Agricultural Practice

**44.0%**

of the beneficiaries who had reached the point of losing all hope to the extent of contemplating abandoning agricultural practices altogether have expressed that they now feel a renewed sense of hope in continuing their traditional occupation.





## SECTION 5.4

### Capacity-building of Forest Department Frontline Staff

#### 5.4.1 INTERVENTION: CAPACITY BUILDING OF FOREST DEPARTMENT

In order to enhance the capacity of the frontline staff of the forest department, NPCI and TCF organised a capacity building program, which 80 frontline forest department staff attended. A field kit was provided for 50 frontline forest department staff.

#### TRAINING WORKSHOP FOR FOREST DEPARTMENT STAFF



## 5.4.2 KEY IMPACT

### Enhanced knowledge and skills in bio-diversity mapping.



The training program enhanced their knowledge and skills in the use of advanced technologies like satellite imagery, remote sensing and field surveys to create comprehensive maps to depict the ecological richness and variability of life forms in the ecosystem.



Beneficiaries acknowledged that understanding biodiversity is of vital importance to conservation efforts, habitat restoration and sustainable management of biodiversity.

### Conservation of medicinal plants.



The training program instilled the importance of identifying and conserving medicinal plants.

### Identification of micro-organisms.



Micro-organisms play a crucial role in biodiversity by contributing to ecosystem functioning and nutrient cycling by enhancing soil fertility and decomposing organic matter. Beneficiaries shared that the training helped them understand the importance of micro-organisms in maintaining biodiversity.

### Mitigating Human-wildlife conflict.



Beneficiaries shared that they learnt various useful techniques and strategies to mitigate wildlife conflicts.

### Strategies for the rescue of wild animals.



The beneficiaries shared that the training program enlightened them on various strategies to rescue wild animals trapped in life-threatening situations, like falling into abandoned wells, getting ensnared in illegal traps set by poachers, animals injured by accidents, etc.

### Enhanced safety while on duty.



The beneficiaries stated that the forest department received kits for 60 staff consisting of camouflage uniforms with T-shirts and Cargo pants, Jungle Boots, Backpacks, and torches, which are vital for ensuring their safety during their operations in the forest.



**NATURE AWARENESS  
AMONG STUDENTS**



## SECTION 5.5

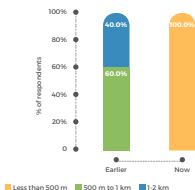
### Jal Minar



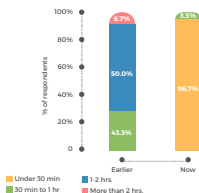
**WATER TANK CONSTRUCTED UNDER THE JALMINAR PROJECT**

#### 5.5.1 KEY IMPACT: ENHANCED ACCESSIBILITY TO DRINKING WATER

**CHART 14: DISTANCE TRAVELLED TO FETCH WATER- EARLIER AND NOW**



**CHART 15: TIME SPENT TO FETCH WATER- EARLIER AND NOW**



Before the implementation of the Jal Minar intervention, 60% of the beneficiaries mentioned that they had to travel between 500 meters to 1 kilometre to access water.



# 40.0%

of the beneficiaries travelled less than 500 meters.

Following the introduction of Jal Minar, all respondents (100%) reported a decrease in their water-fetching distance, with everyone now travelling less than 500 meters.

Before the implementation of the Jal Minar intervention, 50% of beneficiaries spent between 1-2 hours fetching water.

A Significant portion (43.3%) had to spend 30 minutes to 1 hour for this task.

With the introduction of Jal Minars, a significant saving of time occurred, with 96.7% of respondents reporting that they now spend only half an hour to fetch water.

The implementation of Jal Minar significantly reduced the physical drudgery associated with fetching water for all beneficiaries. The intervention also substantially reduced the time spent by beneficiaries on fetching water, indicating improvement in efficiency and convenience.

This saving of time and distance travelled signifies not only increased accessibility but also potential positive impacts on the beneficiaries' daily routines, allowing them to allocate more time to other activities and potentially enhancing their overall quality of life.

## SOULACE TEAM INTERACTING WITH THE BENEFICIARIES



## 5.5.2 LEVEL OF SATISFACTION WITH JAL MINAR

CHART 16: QUALITY OF WATER OBTAINED FROM JAL MINAR

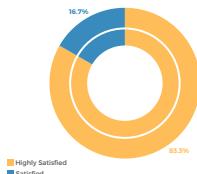
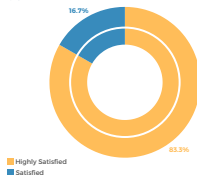


CHART 17: LEVEL OF SATISFACTION WITH THE AVAILABILITY OF WATER SUPPLY



# 83.3%

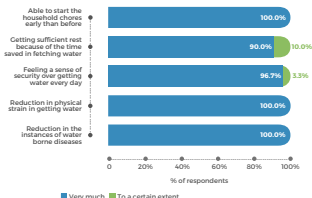
indicated that the water quality obtained from Jal Minar was rated as very good. This same percentage of respondents expressed high satisfaction with the water quality. Additionally, 16.7% of beneficiaries reported the water quality as good and expressed satisfaction with it.

The opinion of beneficiaries overwhelmingly suggests that the water provided by Jal Minar is widely regarded as of very good quality, resulting in high levels of satisfaction among the majority of respondents.

This positive perception indicates the success of the intervention in not only providing accessible water but also ensuring its quality, contributing to the overall well-being and contentment of the community.

### 5.5.3 KEY IMPACT: MULTIPLE BENEFITS EXPERIENCED BY THE BENEFICIARIES

CHART 18: LEVEL OF IMPACT OF THE INTERVENTION ON VARIOUS ASPECTS



#### Reduction in waterborne illnesses



**100.0%**

of the beneficiaries reported getting clean water from Jal Minar, which resulted in a reduction in instances of waterborne diseases.

#### Reduction in physical strain in getting water



**100.0%**

of the beneficiaries shared that since the water source of Jal Minar was within their easy reach, it reduced their physical strain in getting water.

#### Getting sufficient rest



As the physical drudgery of travelling long distances is reduced with the subsequent reduction in time for the same, a majority of the respondents (90%) reported getting sufficient rest because of improved accessibility to water.

#### Sense of water security



**96.7%**

of the beneficiaries shared that they had a sense of water security, as they got an assured supply of drinking water after the Jal Minar intervention.

#### Completing household chores earlier



**100.0%**

shared that since they are able to get water from Jal Minar and maintain adequate storage of drinking water, they were able to start doing their household chores earlier.





## SECTION 5.6

### Livelihood Promotion

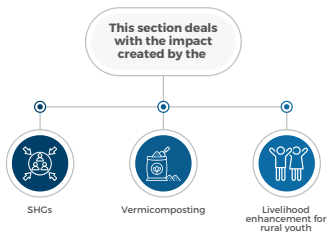
The NPCI-TCF played a pivotal role in establishing Village Development Committees (VDCs) across all project villages to sustain livelihood activities and other components of the Integrated Rural Development Program (IRDP) effectively.

Recognizing the limited scope of existing Self-Help Groups (SHGs) in the project villages, which were primarily engaged in internal lending and savings without involvement in income-generating activities, NPCI-TCF initiated measures to enhance their role. To promote livelihoods, the SHGs underwent comprehensive training in diverse trades, including Katya making, kokum products, laddu making, and chikki making, among others. This expansion of skills aimed to empower the SHGs to actively participate in income-generating ventures, contributing to the overall economic development of the community.

In addition to SHGs, special emphasis was placed on the agricultural sector. Farmers within the community were provided training in vermicomposting and organic farming. This initiative not only aimed at improving crop yields but also emphasized sustainable and eco-friendly farming techniques.

The well-being of livestock, an integral component of rural livelihoods, was addressed through veterinary camps, ensuring the health and productivity of the animals. This holistic approach aimed to create a conducive environment for livestock rearing, which is crucial for the economic stability of many households in the project villages.

Recognizing the importance of youth empowerment, NPCI-TCF extended its efforts to provide skill training for the youth in the community. This initiative aimed to equip them with the necessary skills to enhance employability and contribute to the overall development of the region.



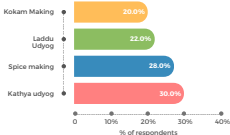
### 5.6.1 INCOME GENERATING ACTIVITIES FOR WOMEN



#### COIR PRODUCT MAKING UNIT OF SHG

### 5.6.2 MAJOR FINDINGS

CHART 19: INCOME GENERATION ACTIVITY THE RESPONDENTS ARE INVOLVED IN



The majority of respondents (30%) were SHG members involved in katya-making activities, followed by SHG groups involved in spice-making (28%), laddu-making (22%) and kokum-making (20%).



**Savitribai Phule Kathya Udyog, belonging to Parpoli village, Jadhav Wadi, stands as a tall testament to how strong social cohesion and team collaboration can lead to mutual well-being and the progress of everyone in the group.**

Facilitated by NPCI and TCF, the group was established in December 2020 with 12 dedicated women who started the production of high-quality door mats. Before the production, the group members underwent a rigorous 15-day training, equipping themselves with the necessary skills required for door mat making. The group sells door mats in the price ranges of Rs.120- Rs.150 and Rs. 700 -Rs. 800/- based on the material and sizes.

What sets this venture unique is the display of team spirit and cooperation, where the women members contribute their labour free of charge and do not take any profits home. Instead, they chose to invest the proceeds in the procurement of raw materials required for continuous production. They get loans from the group at 1% interest, which in turn adds up to the capital of the group. The group has established a strong presence in the local market of Sawantwadi and realises maximum sales during festivals and exhibitions. The enterprise has not only successfully sustained its operations and business with reasonable profits but has also led to the empowerment of women across various dimensions.



#### CHIKKI MAKING UNIT OF SHG, KESARI



### Case Study: Sawantwadi Kokam making cooperative

The Sawantwadi Kokam Making Cooperative was established in 2022 to promote sustainable livelihood and empower the local community through the production and sale of Kokam products. The cooperative, consisting of 11 women, has been led by President Deepika Dinesh Sawant, Vice President Vaibhavi Tukaram Sawant, and Secretary Pranali Pramod Sawant.

NPCI and TCF not only facilitated the establishment of the cooperative but also provided essential training on the production of Kokam-based products. Members were educated on the intricacies of Kokam processing, enabling them to create high-quality products for the market. The initial seed funding was provided by NPCI and TCF, which covered the cost of raw materials, including 100 kg of Kokam at a cost of ₹16,500, and essential equipment such as 48 drums for storage, a packing machine, a weighing machine, plastic bags, and 1,500 branding stickers.

The cooperative produces two main categories of Kokam products: Dry Kokam and Liquid Kokam. The pricing strategy includes retail and wholesale rates:

**Dry Kokam: ₹250 per kg (retail) and ₹220 per kg (wholesale).**

**Liquid Kokam: ₹200 per litre (retail) and ₹180 per litre. (wholesale).**

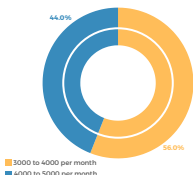
The cooperative actively participates in various markets to sell its products, including weekly markets, local markets, and wholesale markets, which ensures that Kokam products reach a diverse customer base.

Dedicated efforts, market linkages, proper business strategy, and commitment to quality have made Sawantwadi Kokam Co-operative a stellar example of a successful business model that can be emulated by other self-help groups in the region.



### 5.6.3 IMPACT OF IGP ACTIVITY THROUGH THE SHG

CHART 20: EARNINGS PER MONTH DUE TO THE SHG

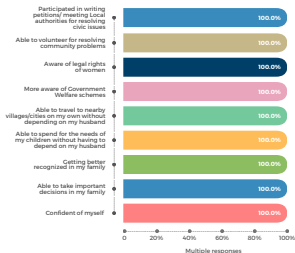


A majority of the respondents (56%) earned between Rs. 3000 and Rs.4000 per month, while the rest earned between Rs. 4000 and Rs.5000/-per month.

### Empowerment of women achieved



CHART 21: LEVEL OF IMPROVEMENT AFTER ASSOCIATION WITH THE SHG



The earning capacity of women in the SHGs has led to enhanced empowerment among them in various ways, as mentioned below.

### Increased self- confidence



The study documented that the ability to earn has instilled a sense of empowerment, fostering self-confidence and belief in personal capabilities.

### Decision-making ability in the family



Interactions with beneficiaries revealed that economic independence gained through participation in income-generating activities has empowered them to actively contribute to family decision-making processes.

### Getting better recognition in their families



Beneficiaries shared that the financial contributions made to the family have elevated their status, which led to increased recognition and respect in their families.

### Ability to spend for the needs of their children



Beneficiaries expressed their happiness in their ability to provide for their children's needs independently, reducing dependence on their husbands for the same.

### Ability to travel independently



Beneficiaries reported that engagement in economic activities necessitated them to travel independently to nearby villages/cities for the purchase/sale of items, which has, in turn, resulted in their confidence to travel independently without having to be dependent on male members of their family.

## Enhanced awareness of Government welfare schemes



Beneficiaries shared that participation in income-generating activities also led to increased awareness and understanding of government welfare schemes, enabling women to access support and resources available to them.

## Awareness of the legal rights of women



Beneficiaries revealed that their involvement in self-help groups facilitated them to be more informed about their legal rights through common discussions, mutual sharing and capacity-building initiatives.

## Ability to volunteer for resolving community problems



Social cohesion achieved due to coming together for income-generating activities also aided the women beneficiaries in volunteering to resolve problems in the community.



Beneficiaries of the Kathya making unit shared that they were able to sell the katya door mats at a good profit.



The beneficiaries said, 'We are able to sell the big-sized mats at Rs.300/- and the small-sized ones for Rs.120/-.'



There is a good demand for our product in Goa, so we attend the Goa weekly market once in 15 days and make a handsome profit.'

“

Established in 2021, Viraj Mahila Bachat Gat in Danoli Village has had a significant impact on the local community, providing women with a meaningful avenue for income generation. With support from NPCI and TCF, the group underwent skill training in pickle-making and basic marketing skills. NPCI and TCF also facilitated the production, storage, and packaging of pickles for sale during the initial stages. The group now operates independently and specialises in a variety of pickles, including amla and carrot. The group is also successful in creating a considerable local market, operating on a made-to-order basis.

Priced at Rs 200 per kilogram, the mango pickle has gained demand in places outside the community. This income generation initiative has not only empowered the women of Viraj Mahila Bachat Gat but has also contributed significantly to the overall economic growth of the community.

The success of this women's group shows how even a small measure of external support and facilitation can positively impact the livelihood of the rural poor, paving the way to escape poverty.

”

## SHG MASALA MAKING TRAINING, SARMALE





## SECTION 5.7

### Livelihood promotion activity - Vermicomposting

“

**Vitthal Kashiram Gaonkar, 63 years old, residing in Jadhavwadi Parpoli Village,** has experienced a significant positive change in his farming practices and overall livelihood owing to the Vermicompost-making training provided by NPCI and (TCF). Vitthal owns land of 2 acres and has 10 cattle but had not thought about the potential to make vermicomposting before the intervention. He used to spend a substantial amount of around Rs. 5000 to Rs.6000/- rupees—on chemical fertilizers per acre of land. Vitthal not only got the training on vermicomposting but also got a dedicated structure constructed for it through the CSR intervention.

As a result of adopting Vermicompost, Vitthal's dependence on chemical fertilizers significantly decreased. He now only invests 1500-2000 rupees on chemicals and fertilizers annually. Furthermore, the adoption of Vermicompost has had a positive impact on crop yield. Vitthal reports a 15-20% increase in yield, proving the effectiveness of organic alternatives in enhancing soil fertility and plant growth. Vitthal Kashiram Gaonkar is not only satisfied with the money saved and the additional income through higher yield but also happy about the quality of the produce. He says, 'I am very thankful for this support, very much useful for farmers like me, by NPCI and TCF.'

”



“

**Arun Desai, aged 50 years, belonging to Devsu village,** narrates his heavy dependence on chemical fertilizers before the intervention, which significantly degraded the soil quality. The introduction of the idea of vermicomposting by NPCI and TCF instilled some hope for improving his farming methods. Arun underwent vermicomposting training in 2021 and received the essential infrastructure and 2 kg of earthworms to initiate the process. Looking at the positive outcomes of vermicompost, he decided to adopt it as a long-term practice. This decision proved to be economically beneficial, resulting in a substantial saving of at least Rs. 8000 on chemical fertilizers. He was getting a rice yield of 700-750 Kg before the use of vermicompost. Now, he can get about 800 to 900 Kgs. of rice yield after the use of vermicompost. He expressed his satisfaction with being able to reduce his reliance on chemical fertilizers and getting additional income due to increased yield. He expresses gratitude, stating, 'I thank NPCI and TCF for providing me with vermicomposting training, which has significantly improved my farming practices.'

”



## 5.7.1 KEY IMPACT OF VERMICOMPOSTING

### Improvement of Soil Health



**80.0%**

of the beneficiaries reported that the use of vermicompost has enriched their soil with organic matter.

They observed healthier soil with better water retention and nutrient content.

### Reduced dependency on chemical fertilizers



**90.0%**

of the beneficiaries noted that the use of vermicompost has helped to substantially reduce the use of chemical fertilizers, which also led to less expenditure on account of its usage.

### Enhanced yield and income



**80.0%**

of the beneficiaries who interacted during the study shared that the use of vermicompost resulted in increased yield between 15% and 25%. This increase in yield also helped them to realise higher income from the produce.

“

**Anusha Desai, Sarmale village, says,** 'I joined the NPCI- TCF youth skill training program in 2021 and received basic training for beautician. I learned makeup, manicures, pedicures, etc. After undergoing the training program, I became more interested in the skill. Now, in my village, I do make in marriages and manage to earn between Rs. 3000 to Rs.5000/.

I am very sure that there is a good scope for beauticians, hence I would like to pursue the advanced course and set up my parlor.

”



**FGD WITH ENERGY EFFICIENT STOVES BENEFICIARIES AT SARMALE**

### VERMICOMPOST UNIT, DEVSU





## SECTION 5.8

### Livelihood opportunities for the youth



#### **Case Study: Enabling livelihood of rural youth through microenterprise**

NPCI and TCF facilitated Amol Babaji Kesarkar, a 42-year resident of Kesari village, to engage in poultry rearing as a part of its efforts to enhance livelihood options for rural youth. The training was imparted on poultry rearing, operating a micro-enterprise and creating market linkages.

The business venture kickstarted with the provision of 120 chickens, a poultry shed to house the chickens, essential poultry feed for six months and other basic infrastructure facilities needed for raising poultry to Amol as a part of the CSR intervention. Amol joined hands with his neighbours Nitin Sawant, Pradnesh Sawant, Baburao Jadhav, and Amit Kesarkar. Encouraged by the dedication of the team and the progress made in a short time, 60 more chickens were provided to boost the enterprise. Amol and Amit took care of the daily operations of the poultry farm, while the other members contributed to business development by securing new customers for chicken sales. In a short period, the team was able to establish business linkage in Goa.

The team adopted a strategic approach to sustainability, purchasing 50 chicks every four months and cross-breeding them with hybrid chickens to enhance egg production. The team sells a variety of chicken products, where hybrid chicken is sold at Rs. 350/- and desi chicken is sold at Rs. 400/-.



Apart from the sale of chicken, the team also sells eggs produced from the poultry, which fetch a minimum of Rs. 3000/- per month. Buoyed by the success, Amol and his team members have plans to scale up the business further. The business venture of Amol and his team members serves as a model for other aspiring youth in the village to engage in microenterprises. Amol says, 'I am thankful to NPCI and TCF for the wonderful business idea and for aiding me in different stages of my business.'





## 5.8.1 KEY IMPACT OF LIVELIHOOD PROMOTION ACTIVITIES FOR RURAL YOUTH

### Creating alternative income sources



With farming being the primary source of income for the community youth, facilitating them to engage in rural micro-enterprises creates more than one source of income, enhancing the economic well-being of the individual and the community.

### Developing business and entrepreneurial skills



The beneficiaries of the livelihood enhancement program experienced significant gains in their ability to conceptualise and execute innovative business ideas. The CSR intervention proved instrumental in unlocking the potential of the rural youth for fostering an environment conducive to learning and executing business ideas.

### Diversifying livelihood opportunities in the rural community



One successful business model in a rural community also had the cascading effect of other community members observing and trying to emulate it. With more community members engaged in varied business activities, the livelihood opportunities of the rural community have diversified to a commendable extent.

## SHG COIR MAKING TRAINING





## SECTION 5.9

### Remedial coaching classes

The CSR intervention was intended to improve the academic performance of students facing educational challenges. Remedial coaching was provided to 752 individuals across 14 schools.

These remedial sessions aided academically weaker students to gain better conceptual and fundamental clarity. The remedial classes contributed to the development of team spirit and the encouragement of extra-curricular skills, including sports and life skills education. These remedial coaching sessions were conducted bi-weekly for each school, with a specific focus on addressing the needs of academically challenged students. School Management Committees (SMC) and parent-teacher meetings were organized to provide orientation for the holistic development of students.

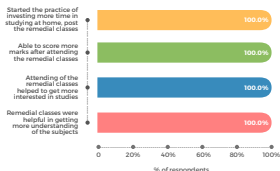
**This section delves into the impact created by remedial coaching classes.**



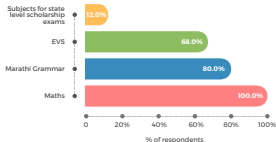
Students are attending a session on Emotional Intelligence as a part of Remedial classes.

### 5.9.1 KEY IMPACT OF THE REMEDIAL CLASSES

**CHART 22: IMPACT OF THE REMEDIAL CLASSES**



**CHART 23: SUBJECTS IN WHICH SCORED MORE MARKS THAN BEFORE**



## Aided better understanding of subjects



All the students who underwent remedial classes acknowledged that they were able to understand the subjects better than through regular classes.

## Gaining more interest towards studies



With concepts being taught in a simple manner with adequate illustrations, learning became more interesting to students.

## Investing more time to study at home



With the gaining of more clarity on academic concepts and more practice by attending additional assessments conducted as a part of remedial classes, all the students shared that they were able to score good marks in their school exams.

## Better academic performance



All the students shared that remedial classes helped them to score more marks than before.

## Improvement of scores in different subjects



Every student (100%) reported an improvement in their mathematics scores compared to before the intervention.

Mathematics, perceived to be a challenging subject by students prior to the remedial classes, was found to be easier post-intervention. The students expressed that they were able to achieve better clarity on concepts and formulas, enabling them to follow simple steps with increased ease.

## SCHOOL STRENGTHENING PROGRAM INFORMATION AND BRANDING





## SECTION 5.10

### K-Yan intervention

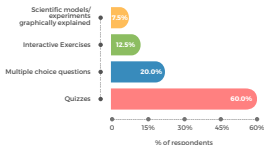
K-Yan is an initiative aimed at enhancing the educational experience by providing a digital platform for both teachers and students. As part of this initiative, 15 devices were distributed across 11 schools, benefiting a total of 587 students and teachers.

K-Yan is an all-in-one digital educational device that combines a computer, projector, and multimedia functionalities in a single, user-friendly unit. Its portability makes it suitable for use both inside and outside classrooms, catering to special events in schools. The learning contents of K-Yan can be effortlessly displayed on any wall without the need for a specific screen. A built-in syllabus, with an enhanced storage capacity of 1 TB, aids teachers in delivering concepts for various subjects while students can effectively engage in the learning process.



Students attending a classroom session with K-Yan

#### CHART 23: MOST PREFERRED ACTIVITY



#### 5.10.1 STUDENTS' MOST PREFERRED ACTIVITY IN K YAN

The most popular activity through K Yan turned out to be quizzes, as shared by 60% of the students.



20.0%

of the students preferred answering multiple choice questions through K yan, while interactive exercises (12.5%) and science experiments and models (7.5%) were also preferred by the students.

## 5.10.2 KEY IMPACT OF K YAN CLASSES

CHART 24: EFFECTIVENESS OF K YAN CLASSES

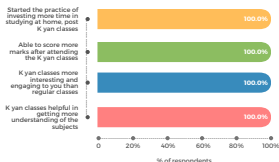
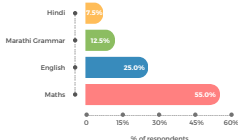


CHART 25: SUBJECTS IN WHICH SCORED MORE MARKS THAN BEFORE



### More interesting and engaging than regular classes



All students shared that K yan made their learning interesting. They factored the engaging animations and graphics, helping them in better visualisation to be the reason for feeling more interested and engaging than regular classes.

### Better understanding of subjects



Students expressed that concepts were simplified, and they were able to understand them better. The interactive simulations and practical demonstrations aided the students to experiment and explore the concepts in a virtual environment.

This led to a deeper understanding of the subjects than through usual lectures in the class.

### Investing more time in studies



Enhanced understanding of the subjects also inculcated a measure of interest in studies among students.

### Scoring more marks in the exams



As students were able to understand the subjects and learning was felt to be an interesting pursuit, correspondingly, all students reported scoring more marks in the exams than before.

A majority of the students (55%) scored higher marks in mathematics, followed by higher marks in English (25%), Marathi Grammar (12.5%), and Hindi (7.5%).

“

**My daughter, Shreya, studies at the 6th standard in the Z.P. school, Sarmale Devul.**

Earlier, my daughter used to be very hesitant to use the school toilet due to its unhygienic condition. After the renovation work on the toilet, she is feeling comfortable using it. Clean toilets are essential for children to stay healthy without getting any infections.

This is especially an important need for the girl child. I am grateful to NPCI-TCF for this good initiative.

”



“

**Mr. Gundu Arjun Sawant, Cluster Head of ZP Primary School, says,** 'I oversee the operations of nine primary schools and two high schools. The implementation of the K-Yan program has effectively addressed the shortage of teachers, which is a positive measure for education management. The integration of K-Yan technology has not only bridged the gap in staffing but has also enriched the learning experience for both students and educators alike.

One commendable aspect of K-Yan is that it helps in bringing about the proactive involvement of students in learning. With the introduction of video lectures and interactive discussions, students have not only become adept at using the technology but have also exhibited increased interest and engagement in their studies. The use of K-Yan extends beyond the classrooms, where teachers use them for monthly meetings, training sessions, and presentations for teachers. This has not only helped in effective communication but has also enhanced the overall efficiency of administrative processes within the cluster.

”

“

**Rasika Ramakrishna Divaskar says,** 'My daughter Manjari Divaskar studies in 6th standard in Z.P. school, Devsu, and she used to come and tell me about what she learned through K-Yan. She shared that she learned about different plants and animals in the forests, which animals are endangered and how to protect the forests.

She shows much interest in learning Mathematics and English and spends more time studying at home. She scored better marks than before, and I am very happy about it. '

”



“

**Roshni Roshan Raut, Assistant Teacher handling 5th and 6th standards at the Z.P. School, Devsu school, says,** 'I underwent K-Yan training, facilitated with support from TCF, which enabled me to proficiently operate the equipment. K-YAN is very helpful in teaching various subjects such as English, Maths, Science, Social Science, and Grammar. The equipment is aligned with the Navneet syllabus for Maharashtra State Board from 1st to 10th class. I learned how to make presentations on different themes and subjects. The two-day training I received equipped me with the necessary skills to explore K-YAN as much as possible. I also underwent further training in 2022 to stay abreast of the updated syllabus. Students find it interesting to learn with the help of K-YAN.

”

## CLASS INNER WALLS PAINTED IN ATTRACTIVE COLOURS AND EDUCATIVE MATERIALS AT Z.P.SCHOOL, SARMALE DEVSU

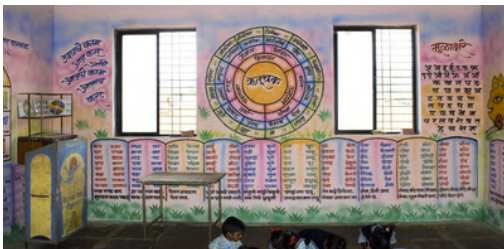




## SECTION 5.11

### Infrastructure Strengthening in Schools

NPCI, through TCF, implemented infrastructure improvement projects in 13 schools across 12 villages, benefiting 466 students and teachers. The primary goal was to enhance the learning atmosphere, infrastructure, and hygiene standards. The initiatives included resource strengthening, installation of tap-water supply for toilets and hand-wash stations, and painting of school buildings and interactive walls. These efforts aim to create a clean and hygienic environment, foster children's interest, and reduce dropout rates.



Educational materials were painted in the Z.P. school, Patilwadi Chakuli



Wall painting in Z.P. school Sarmale Devul



*Handwashing station at Z.P. school, Malawadi Nene*



*Painting of Z.P. school, Parpoli*



## 5.11.1 SCHOOL INFRASTRUCTURE STRENGTHENING PROGRAM

This section discusses the impact of the strengthening of the infrastructure through the major activities of toilet renovation and construction/refurbishment of handwashing stations in the zilla parishad schools of the project villages.

### 5.11.2 KEY IMPACT OF TOILET RENOVATION

#### Improved Hygiene and Sanitation



**80.0%**

of the parents expressed that upgrading and renovation of toilets have resulted in improved hygiene and sanitation for their children studying in the schools.

Better toilet facilities was a long-felt demand which has been fulfilled now through the toilet renovation activities are done in the schools.

#### Reduced U.T. infections and other contagious diseases



**70.0%**

of the parents observed that renovation of toilets has led to reduced instances of urinary tract infections among their children.

The spread of other contagious diseases was also observed to have been reduced post-intervention.

#### Reduced absenteeism and better learning outcomes



**70.0%**

of the teachers noted there was an improvement in student attendance post intervention as there was reduced absenteeism, owing to better health of students.

#### Enhanced goodwill in the community



Toilet renovation and other infrastructural work have resulted in a better image of the schools in the project communities. This has, in turn, led to a better community perception of the school and earned the goodwill of the community.

### 5.11.3 KEY IMPACT OF WALL PAINTING IN SCHOOLS

#### Creation of an immersive learning environment



School teachers of the Z.P. schools in the project villages commended that the educative content painted in the inner walls of the classrooms helps children better visualise and understand things rather than through mere verbal instructions.

These aided in better retention of the educative content by the children. Parents of the students studying in the Z.P. schools interacted during the study and also felt the same way.

#### Fostering a sense of motivation to learn



Interactions with students of the Z.P. Schools revealed that the educative murals painted on the exteriors and interiors of the school, apart from adding to the aesthetics of the school, also foster a sense of motivation to learn better and achieve more.

#### Enhanced community engagement



Community members expressed that the enhanced appearance of the school has fostered a sense of pride within the community, as they now take pride in having a more improved school.

Kindled by the positive impact of ongoing development initiatives within the school, there is an observable increase in community involvement with the school than before.

“

My son, Ovi Sanjay Gavde, studies in the 6th grade, and my daughter, Ishwari Gavde, is in the 3rd grade. I can see the outer walls are painted in attractive colours, and there are paintings of educative materials in the classrooms. These have added to the beauty of the school, creating a pleasant environment for the students. My children are happy about the changes that happened in their school, and they come and share their joy with me.

Due to the renovation activity supported by NPCI-TCF, the school environment has transformed in a commendable manner, and I thank them for carrying out this work.

”





## SECTION 5.12

### Supply of educational kits to needy students

Educational kits were supplied to 799 needy students belonging to 14 project villages, with the intent of reducing the economic burden of the parents in providing educational materials to their children and, instilling confidence and bringing about attitudinal change towards education.

#### 5.12.1 KEY IMPACT OF THE INTERVENTION

##### Enhanced access to learning resources



**90.0%**

of the parents of students who received educational kits shared that the CSR intervention improved their children's access to essential items like pens, pencils, notebooks, rulers and other stationery items necessary for studies.

##### Enhanced learning environment



**80.0%**

of the teachers felt the availability of stationery items created a better learning environment for the students both at school and at home, with the positive feeling of having essential things required for academic assignments.

##### Reduced financial burden



**90.0%**

of the parents expressed that the CSR intervention reduced their financial burden towards buying these essential supplies to a larger extent, and they did not have to spend any amount of money on these items throughout the year. It brought a huge financial relief to the underprivileged parents.

##### Boosting confidence and morale towards education



Receipt of these stationery items boosted the confidence and motivation among students to participate in learning activities, as these materials largely aided them in completing the assignments on time.

“

My son Shreyas Kashiram Jadhav is studying at the 7th standard. He received an educational kit containing notebooks, pens, pencils, rulers, erasers, etc. Those items were sufficient for the whole year,

and we did not have to spend any money on these items for over a year.

**Karuna Kashiram Jadhav**

”



“

**Mrunali Shivram Jadhav, mother of Maithili Shivram Jadhav, studying in the 5th standard, says, \***

I am very happy that my daughter has all the stationery and school supplies to last for a year. With our little means, it is difficult to fulfil all the needs of our children. The supply of educational materials has reduced our financial burden to a larger extent.

”





## SECTION 5.13

### Anganwadi strengthening

The CSR initiative focused on enhancing pre-primary education to foster the socio-psychological and emotional development of children. Support was provided to anganwadis, where the walls were adorned with interactive educational content. This intervention aimed to establish a positive environment conducive to playing, socializing, and learning for young children.

To reinforce the pre-primary education infrastructure, the project targeted the improvement of 10 anganwadis across 7 villages.

The initiative positively impacted 128 tiny tots and teachers by creating an enriched learning environment.

**This section discusses the impact resulting from the infrastructural enhancements implemented through the project intervention.**



Interaction with Anganwadi Teachers



CHAUKUL ANGANWADI  
BEFORE & AFTER



DEVSU ANGANWADI  
BEFORE & AFTER

“

**Testimonial of Anganwadi Teacher-1**

Sanchita Santosh Sawant, the Teacher, Khalchiwadi Anganwadi, says, 'Our Anganwadi has 33 children. We did not have a proper partition in the kitchen, and also the Anganwadi lacked a wash basin and water connection, making it very difficult for children to wash their hands after having food. The painting of the school building was faded and had a dull look. The Anganwadi also did not have educational materials painted. NPCI and TCF assessed the needs of this school, and they have done a lot of renovation work in the school. The kitchen now has a proper partition, and the risk of children entering the kitchen and accidentally getting hurt has been averted. The painting of educational content on the walls has created much interest in the children to observe and learn. I thank NPCI and TCF for renovating our Anganwadi.'

”

“

**Testimonial of Anganwadi Teacher-2**

Samita Ramchandra Sawant, a Teacher at Dhangarwadi Kesari Anganwadi, says, 'NPCI-TCF carried out the painting of the Anganwadi building both in the interiors and the exteriors. The exteriors of the Anganwadi looked dull earlier, but after the painting work, they look good. The interior walls were with educational material. The children like it very much, and the environment is conducive for them to come happily to the Anganwadi every day. Some portions of the roofs and the slabs, which were damaged, were repaired, and it is now very much safe for the children. I thank NPCI and TCF for making the Anganwadi pleasing for the children.'

”

### 5.13.2 KEY IMPACT OF THE ANGANWADI RENOVATION

#### Enhanced interest among tiny tots



**80.0%**

of the parents of Anganwadi children conveyed that the classroom atmosphere is pleasing and visually engaging for their kids. As a result, the children now exhibit heightened interest in attending Anganwadi every day compared to earlier.

#### Improved parental involvement



**70.0%**

of the teachers have noted that due to the improvements in the Anganwadi and the increased enthusiasm of children attending, parents are now more interested in enrolling their children and actively engaging in discussions about their progress in the Anganwadi. There is a noticeable rise in parental involvement compared to the period before the intervention.

#### Garnering goodwill of the community



The improvement in the Anganwadi infrastructure, expanding its accessibility to a greater number of children in the community, has attracted increased interest among community members and fostered a positive perception of the Anganwadi in the community.



#### PROJECT INFORMATION AND BRANDING AT KESARI VILLAGE



#### ORGANIC COMPOST UNIT UNDER WASTE MANAGEMENT PROGRAM, AT KESARI VILLAGE



## SECTION 5.14

### Conservation Education

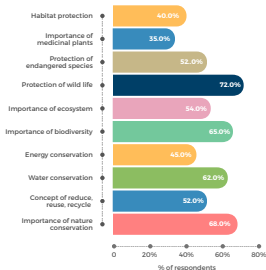
Towards the purpose of creating awareness of conservation among students, NPCI and TCF launched the initiative of "Sahyadri Nisarg Shala", where students from std. 1 to 7 were involved in the awareness generation sessions conducted once a week. Apart from students, the initiative also intended to create awareness among the elders in the villages. About 1700 school children and adults were reached out through this initiative. Days that are celebrated nationally and internationally were marked, and activities of local relevance were organised in various project- villages. An effort was made to involve various stakeholders in these activities.



Environment session was conducted by TCF for the school students

### 5.14.1 MAJOR FINDINGS OF THE STUDY

CHART 26: TOPICS RECALLED BY STUDENTS



### Recall of topics on nature education

The students who attended the nature conservation education were able to recall the topic covered during the nature education sessions.



**72.0%**

of the students were able to recall the protection of wildlife, followed by the topics of the importance of nature conservation, biodiversity, and water conservation.

Students were also able to recall topics related to habitat protection, the importance of medicinal plants, the concept of the 3 Rs, and energy conservation.

## 5.14.2 KEY IMPACT

### Enhanced environmental awareness



Interactions with the students revealed that environmental education has increased their awareness about the environment.

### Appreciation of nature and wildlife



The students shared they were better able to appreciate the importance of nature and wildlife after the training program than before.

### Cognitive development



Teachers observed that students' involvement in nature-based programs had aroused their curiosity, observation and problem-solving skills, leading to better cognitive development among them.

### Creativity and innovation



Teachers observed that nature-based program activities kindled creativity and innovation among the students.



ANGANWADI CENTER AFTER RENOVATION AT KESARI VILLAGE.



## 06. OECD FRAMEWORK



### Relevance

A systematic needs assessment study was undertaken before launching the IRDP program, which helped identify the real needs and challenges of the project communities. The program has addressed the multisectoral needs of the community, ranging from the prevention of crop losses due to frequent animal raids, the provision of drinking water, livelihood promotion to multiple beneficiary groups within the community, and support for education and environmental conservation.

The program has prioritized social equity and inclusion of the marginalized sections of the community in its coverage.

Hence, the IRDP program can be considered to be very relevant.



### Coherence

The IRDP project has aided in furthering multiple SDGs in the project villages such as

Goal 1: No Poverty

Goal 3: Good health and well-being.

Goal 4: Quality education

Goal 5: Gender Equality.

Goal 6: Clean water and sanitation.

Goal 7: Affordable and clean energy

Goal 8: Decent work and Economic growth.

Goal 13: Climate Action.

Goal 15: Life on Land

Goal 17: Partnership for Goals.



The program is also in alignment with the purposes of the IRDP program of the Government of India, launched in 1978.

Hence, the program can be said to be very coherent.



### Effectiveness

The IRDP has successfully achieved its intended objectives in improving the economic well-being of individuals and groups within the communities. Through a multipronged approach, the program has significantly diminished the reliance of local communities on natural resources, promoting better environmental preservation.

The implementation of measures such as crop-raiding protection torches, solar fencing, and solar street lights have substantially controlled animal raids and incursions into the community. Furthermore, the program has actively created livelihood opportunities for both youth and women, thereby enhancing their economic well-being.

Thus the program can be stated to be high in its effectiveness.



### Efficiency

The project components were designed to have lasting economic viability. The success of livelihood promotion activities as revenue-generating business models indicates that these initiatives are not solely dependent on external funding, thus ensuring that the economic benefits continue beyond the initial funding period, contributing to the long-term economic well-being of individuals, groups, and the community.

The Natural Resource Management program, by minimizing the negative impact of animal raiding on crops, has directly contributed to agricultural sustainability. The increased crop yields have led the farmers to improve their income levels. The long-term benefit of enhanced agricultural productivity supports the overall economic resilience of the community.

Strengthening educational infrastructure in schools and Anganwadis brings both tangible and intangible benefits. An educated population is more likely to bring about more economic growth in the long run.

The outcomes of the program far outweigh the investments made. Hence, the IRDP program can be said to be high in efficiency.



### Impact

The IRDP intervention yielded positive outcomes across various segments of the community.

Farmers experienced a substantial reduction in animal raids, safeguarding their crops and leading to increased income levels. A considerable number of women and youth groups in the project villages acquired micro-enterprise skills, securing sustainable livelihoods crucial for their economic well-being and that of their families.

The investment in educational infrastructure not only created a positive learning environment for children but also garnered goodwill from the community.

Thus, the IRDP program can be stated to be high in its effectiveness.





## Sustainability

Beneficiaries received essential equipment such as energy-efficient stoves, crop raiding protection torches, and solar fencing, empowering them for long-term utilization.

Community structures like solar street lights and Jal minar were handed over, with capacity-building efforts ensuring their enduring functionality.

Livelihood promotion activities have the potential to provide continuous employment and income to the community's youth and women. Linking Self-Help Groups with banks for loans and financial transactions is a measure of financial empowerment.

The capacities of individuals, groups, and the community have been built to ensure the lasting viability of the established structures.

Hence, the IRDP can be described as highly sustainable.



Relevance



Coherence



Effectiveness



Efficiency



Impact



Sustainability

## CHAPTER 7

# RECOMMENDATIONS

### 1. ENHANCING PERFORMANCE AND PRODUCTIVITY OF INCOME GENERATING ACTIVITIES.



CSR interventions focused on livelihoods have shown promise by directly benefiting individuals and groups, providing them with increased opportunities for additional income at both individual and collective levels.

The following suggestions can be considered for enhancing the performance and productivity of IGA.

#### A. Conducting Comprehensive Market Research and Analysis.



A thorough and systematic market research is essential to identify potential customers and understand their needs and preferences within the local region. This approach provides a comprehensive understanding of the market for products generated by Self-Help Group (SHG) members. Analyzing market trends, assessing competition, and determining appropriate pricing strategies are crucial steps to enhance economic opportunities for SHG members.

#### B. Strengthening Market Linkages



Identifying collaborations with bulk buyers and establishing strong linkages with potential customers are vital for ensuring sustainable business opportunities throughout the year. By fostering strategic partnerships, IGP's can gain access to consistent demand and create a stable income stream for SHG members

#### C. Introducing Value-Added Products



Adding value to existing products can significantly increase revenue streams. For instance, in Kokum production, leveraging its therapeutic and medicinal properties to produce value-added products such as kokum syrup, sharbet, juice, and butter can enhance profitability and attract higher prices in the market.

#### D. Scaling Up Select Income-Generating Activities



Poultry farming shows promising economic potential, but current revenue levels may be suboptimal. Scaling up operations can lead to increased revenue and profitability through advantages like bulk purchasing of feed and optimal resource utilization. Diversifying poultry farming with value-added products such as organic eggs and specialty breeds can further enhance profitability and market competitiveness.

## E. Commercial Vermicomposting



While many farmers possess the skills for vermicomposting, production is primarily for personal use. Scaling up vermicomposting activities to commercial levels presents an opportunity for increased revenue and additional livelihoods for farmers. By tapping into the commercial market, farmers can leverage their expertise to meet growing demand for organic fertilizers and contribute to sustainable agricultural practices.

## 2. EXPANDING THE OUTREACH OF MHM



Expanding the outreach of Menstrual Hygiene Management involves empowering community women to become mentors, thereby facilitating awareness among adolescent girls on various menstrual hygiene issues.

By training these mentors, we can effectively disseminate knowledge and practices that promote better menstrual health within the community. This approach can foster a sustainable model where local women play pivotal roles in addressing menstrual hygiene challenges. Ultimately, it can lead to improved menstrual health outcomes and empowerment among adolescent girls.

## CHAPTER 8

# CONCLUSION

The success of the Integrated Rural Development Program (IRDP) is evident from its multifaceted approach towards enhancing the economic well-being of individuals and groups within the communities. The program's strategic implementation of crop-raiding protection measures, solar infrastructure, and micro-enterprise skill development has not only reduced the dependence on natural resources but has also effectively promoted a more sustainable and resilient community.

The positive outcomes are observable across various dimensions of natural resources management, drinking water, capacity building for forest department staff, strengthening of the school system, refurbishing the Anganwadis, etc., Farmers have experienced a significant reduction in animal raids, leading to increased income levels and safeguarding their crops.

Women and youth, through the acquisition of micro-enterprise skills, have secured sustainable livelihoods, contributing to the overall economic upliftment of their families. This has, in turn, empowered them, reducing their dependency on their spouses to run the family, improving their mobility and instilling a sense of self-efficacy.

The investment in educational infrastructure and the provision of essential equipment have not only created a conducive learning environment for children but have also garnered goodwill and support from the community. Investment in education is bound to have a long, enduring impact on the lives of individuals and has the potential to transform the socio-economic status of families and the community as well.

The handover of community structures, such as solar street lights and Jal minar, along with capacity-building efforts, is the right mechanism to ensure their lasting functionality, contributing to the long-term sustainability of the interventions.

The empowerment of the community through initiatives like linking Self-Help Groups with banks for loans and financial transactions reflects a commitment to fostering a sense of financial independence.

The capacity-building initiatives undertaken by the IRDP have played a crucial role in ensuring the lasting viability of the established structures. Through these efforts, not only have the immediate challenges been addressed, but the community has been equipped with the skills and knowledge necessary for self-sufficiency and resilience.

Thus, the Integrated Rural Development Program has demonstrated the transformative potential of all-around community-focused interventions, covering multiple aspects of rural community life. The Program has been observed to have delivered the avowed objectives as envisioned in a larger measure.