



**GHARDA  
CHEMICALS LIMITED**

# Corporate Social Responsibility

Impact Assessment

## 2024-25



Report By  
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The Social Impact Assessment for 2024-25 evaluates the potential and actual social impact created by projects supported and implemented by Gharda Chemical Limited (GCL). This assessment focuses on the effects of these projects on the project beneficiaries, local communities, stakeholders, and society as a whole. These projects, funded through GCL's CSR contributions, are located in rural areas and are around the GCL manufacturing units, including Khed block in Ratnagiri district, Maharashtra, and Ankleshwar block in Bharuch district, Gujarat.

The assessment covers projects related to integrated rural development, elderly care, preventive healthcare, upgrading educational facilities in primary and secondary schools, and promoting agriculture to enhance farmers' livelihoods.

A mixed-methodology approach, combining qualitative and quantitative methods, was used to capture data on the benefits derived from the inputs and interventions by implementing organizations and GCL. Indicators were developed to measure inputs, outputs, and outcomes of the projects. The assessment involved 716 samples from the implementing areas and focused on social, educational, and health improvements in the context of sustainable development goals.

To understand the progress and impact, the following section will discuss the different projects carried out and their results. We will look at how these initiatives have contributed to social, educational, and health improvements.

## **Empowerment of Community**

The Integrated Rural Development Projects in Ankleshwar and Khed have significantly contributed to the community empowerment process. Beneficiaries, their families, and the community as a whole have come to understand that the combination of information, knowledge, and action can drive social change. The introduction of drinking water facilities at the doorstep has allowed villagers, especially women, to realize that they can utilize the time saved from water collection for alternative income-generating activities. The doorstep accessibility of drinking water facilities has reduced the drudgery of girls and women from the families. This has also reduced the health-related issues women faced associated with fetching water from far. Additionally, women and young girls in Ankleshwar, who participated in the menstrual hygiene project, have successfully overcome myths and adopted healthier menstrual care practices. Furthermore, it has been observed that farmers are actively participating in the promotion of artificial insemination techniques, indicating a shift towards modern animal husbandry practices.

## **Quality of Life**

While interacting with the villagers and beneficiaries, it has been observed that CSR projects such as solar street lights impacted lives of the community. In the absence of streetlights in the community, villagers' movements were restricted in the evening due to darkness but now since solar street lights are installed, villagers are able to access health services during emergencies, youngsters are able to have social gatherings and improved sense of safety in the community, whereas elderly care projects implemented through International Longevity Centre (ILC) impacted the lives of senior citizens positively. Interventions such as physiotherapy sessions and digital literacy have led to improvement in quality of life.

## **Leading Towards Family Economic Growth**

The menstrual hygiene intervention has led to increase the use of Sanitary pads during the menstrual period. The beneficiaries reported that the adoption of this practice has helped reduce incidence of Urinary Tract Infections (UTIs) which has further reduced their out of pocket expenses on the related health issues. The training and installation of the Sanitary Pad Machine has ensured the accessibility and affordability of quality sanitary pads. The physiotherapy services for senior citizens have helped the beneficiaries to get peer support, improve their physical mobility, muscle relaxation and further reduced the healthcare costs leading to family savings (per sessions of Rs. 150 - Rs. 500). The psycho social

support received by the elderly was much appreciated by the beneficiaries and their families. Solar-powered streetlights have enhanced the sense of safety, allowing people to work longer hours, contributing to increased income. Agricultural initiatives like vermicomposting and Azolla cultivation have lowered input costs, boosted farmer income, while sold calves from AI has provided emergency cash flow between Rs. 20,000 to Rs. 75,000 depending on the calves' age. Overall, these efforts have resulted in increased milk output, higher crop yields, and substantial economic growth for families and communities.

## **Environment Consciousness**

Enhanced environmental consciousness has led to significant changes in students behaviour and community practices. Students initiated school garden projects and composted food waste, reducing waste in school by collecting wrappers at one place, and decreasing the workload of waste collectors. There is also reduction in electricity expenses by Rs 65/- per month observed in schools and Rs 75-100 at home, while adopting water conservation by using collected rainwater for trees. Broader initiatives like vermicomposting and Azolla cultivation have improved soil health and reduced chemical inputs, and solar-powered streetlights have lowered carbon footprints. Together, these efforts foster sustainable livelihoods, responsible resource use, and enhance community well-being.

## **Health and Well-being**

Health and Well-Being Initiatives for Sustainable Growth have significantly improved rural communities. Increased awareness of menstrual hygiene has reduced school absenteeism by 95%, fostering better educational outcomes. Physiotherapy sessions have alleviated knee pain for seniors, leading to lower healthcare costs and enhanced community bonding. Improved emergency care services have ensured quicker access to medical assistance, ultimately saving lives in remote areas.

## **Education Initiatives**

Education initiatives for sustainable growth have transformed the rural learning environment. Enhanced science labs and moveable projector hands-on experiences have boosted student engagement and gradually developed interest in science. The installation of 175 new fast desktops has enabled students to efficiently complete projects, assignments, and exams on time through improved technology. Cultural events and environmental activities have improved attendance and fostered a sense of responsibility among students.

## **Effect on community**

The project has improved access to essential resources, enhancing livelihoods and reducing financial stress for farmers and SHG women. Reliable healthcare and ambulance services have led to better health outcomes and increased

community confidence in local facilities. Improved educational infrastructure and sanitation have boosted school attendance and overall health seeking behaviour from public health facilities, creating a more engaged and healthier community.

## **Effect on stakeholders**

The project has fostered collaboration among local leaders, schools, and authorities, enhancing their role in community development. Students and teachers benefited from interactive labs and modern teaching tools, improving learning outcomes and professional growth.

## **Recommendation**

- Establish local committees to ensure sustainability and scale interventions in healthcare, education, and agriculture, fostering community ownership.
- Provide ongoing training for stakeholders to enhance skills and promote economic empowerment.
- Integrate technology like mobile apps and e-learning to improve efficiency in healthcare, education, and farming.

# INTRODUCTION



## About Gharda Chemicals Limited

Founded in 1967 by Padmashri Dr. Keki H. Gharda, Gharda Chemicals Limited (GCL) stands as a leading research-based chemical company specializing in the manufacturing of crop protection chemicals, intermediates, high-performance polymers, and pigments. Embodying the vision of "Knowledge converted to products, to wealth for the good of society," GCL is renowned globally for its high-quality products and innovative processes. Looking ahead, GCL is committed to expanding its research initiatives beyond agrochemicals, high-performance polymers, and pigments, venturing into other fine chemical domains.

Since 1980, GCL has allocated its CSR resources towards impactful social initiatives. Adhering to the guidelines of Section 135 of the Companies Act, the company has developed robust structures and processes for CSR implementation. In 2021, GCL invested Rs. 13 Cr. towards sustainable projects in water conservation, quality education promotion, preventive healthcare, and environmental protection. These initiatives were executed through various implementing agencies across identified geographical areas.

## Social Initiatives Covered Under Impact Assessment Study

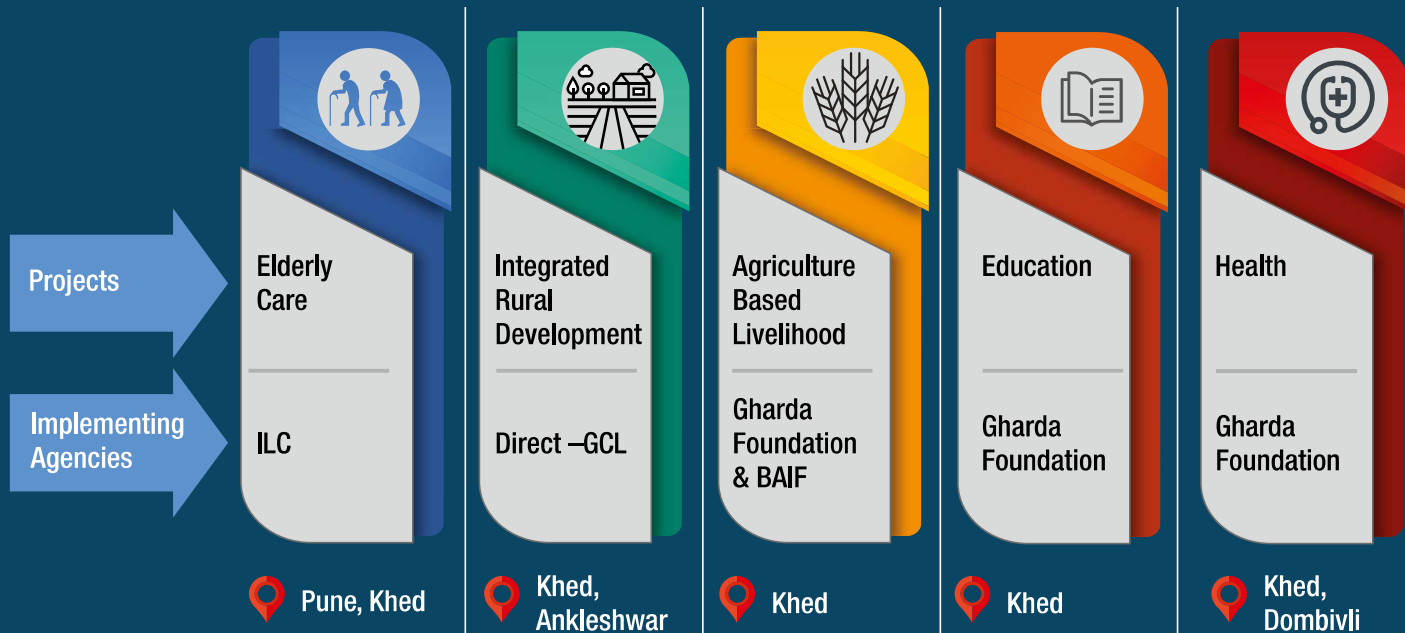
### Csr Projects

1. Elderly Care
2. Integrated Rural Development
3. Agriculture-based Livelihood
4. Education Health

### The Study was conducted with the following objectives

1. To evaluate the project's effectiveness by determining the extent to which the stated project objectives have been achieved
2. To evaluate direct and indirect impact on project participants and the community and to understand the economic and social value accrued as a result of the project, by using relevant qualitative and quantitative indicators.

**These projects were mainly implemented in and around GCL manufacturing sites in Gujarat and Maharashtra.**



These projects are aligned with sustainable development goals namely Good Health & Well-Being, Quality Education, Clean Water, Sanitation and Climate Change.

## CSR Social Projects

- Elderly Care project implemented by International Longevity Centre at Pune, Khed, Alibaug, Solapur etc. This project was focused on providing physiotherapy sessions, smart mobile usage training and food grain distribution
- Integrated Rural Development (IRD) projects at Khed focused on facilitating drinking water accessibility, environment education for children and upgradation of village level school infrastructure, whereas IRD projects at Ankleshwar focused on adolescent health, promotion of solar street lights.
- Agriculture Based Livelihood – The project promoted best agriculture practices, developed agriculture resource centre and promoted artificial sorted semen in order to promote animal husbandry and create livelihood opportunities amongst farmers

- Health Projects mainly supported BRBG hospital to strengthen facilities at hospital, whereas education projects supported Gharda Technical Institute for upgradation of learning facilities through Gharda Foundation

As a part of Gharda Chemicals CSR initiative, an impact assessment was conducted for multiple projects to evaluate its social change. The CSR impact assessment reviewed programs in education, healthcare, rural development, and agriculture, emphasizing increased access to resources and fostering economic growth. The study revealed enhanced quality of life and individual empowerment among beneficiaries, alongside strengthened community cohesiveness. It assessed the long-term social changes fostered through these initiatives.



## Abbreviations

- CSR – Corporate Social Responsibility
- GF - Gharda Foundation
- BRBGH - Bai Ratan Bai Gharda Hospital
- AI - Artificial Insemination
- UTI - Urinary Tract Infections
- ILC – International Longevity Centre
- IDI - In-Depth Interviews
- FGD- Focus Group Discussion
- SHG – Self Help Group
- GIT - Gharda Institute of Technology
- AICTE - All India Council of Technical Education
- CCF - Central Computing Facility



# 03

## METHODOLOGY

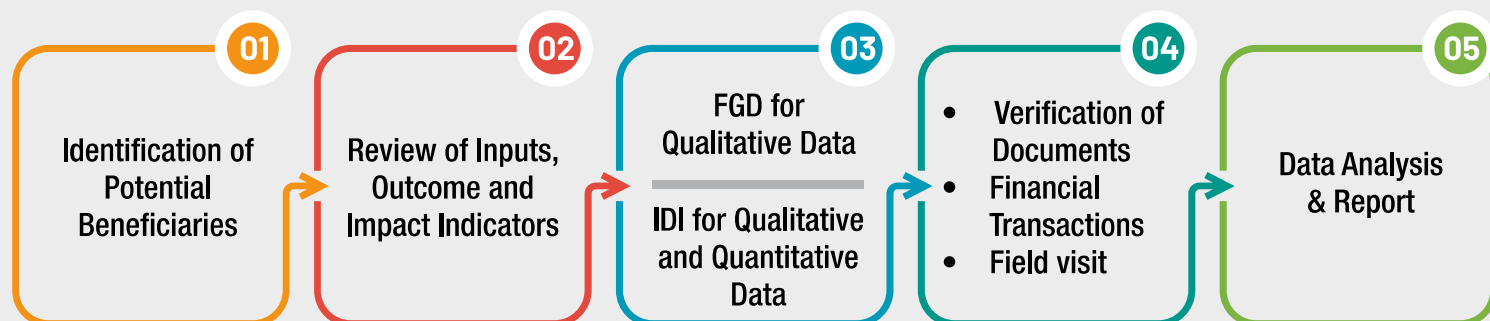


### Method for Impact Assessment-

The study employed a mixed-methods approach, combining quantitative surveys with beneficiaries and qualitative insights from in-depth interviews, focus groups and site observations.

### Sampling -

For the study, a random sampling method was used to select respondents. This approach ensured that each participant had an equal chance of being chosen, which helped in achieving a representative and unbiased sample.



Total Projects

5

Locations

8

Total Sample Covered

716

Type Of Beneficiaries - Farmers, Villagers, Women, School Students, College Students, Senior Citizens

### Sample Size Calculation Formula:

Based on the formula, a sample size of 384 was calculated for a 95% confidence level with a 5% margin of error. The sample size exceeded the originally calculated requirement for additional coverage. Consequently, more participants were included to ensure comprehensive data coverage, increasing the robustness and depth of the findings.

Where:

- $n$  = Sample size
- $Z$  = Z-score (the number of standard deviations a data point is from the mean), for 95% confidence level,  $Z = 1.96$ ; for 99% confidence level,  $Z = 2.58$ .
- $p$  = Estimated proportion of the population that exhibits the characteristic (if unknown, use 0.5 for maximum variability).
- $e$  = Margin of error (expressed as a decimal, e.g., 5% margin of error = 0.05).

Result: A sample size of 384 was initially calculated, however final total of 400 samples were rounded off.

Qualitative Sample: 316 samples were covered during the qualitative phase to gain in-depth exploration of responses and understanding of emerging themes. (Sample distribution table is in Annexure 1)



04

Locations: Khed & Chiplun  
Direct Implementation

# CSR Projects

## Integrated Rural Development







A

Water Accessibility

## Introduction

A water accessibility project aims to provide reliable access to clean and safe water, addressing critical needs in underserved communities. By improving water availability, the project promotes better health, hygiene, and overall quality of life.



Problem 	Intervention 	Outcome 	Impact 
<ul style="list-style-type: none"> <li>Distance - Women used to fetch water from 500 meter to 1 Km</li> <li>Time Spent 3 hours per day</li> <li>Economical Loss – Rs. 600/- (@ Rs. 200 per hour)</li> <li>Health – Strenuous, body pain</li> </ul>	<ul style="list-style-type: none"> <li>Water Supply at doorstep</li> <li>Material- 1 km pipeline, water storage tank</li> <li>Infrastructure repairs</li> <li>Community training and maintenance</li> </ul>	<ul style="list-style-type: none"> <li>Saved 3 hours daily, which is 21 hours in a month</li> <li>Saved time is invested in farming and family responsibilities</li> <li>Water is available at doorstep</li> <li>Reduction in drudgery and associated health related issues</li> <li>Utilization of time saved to pursue income generation activities</li> </ul>	<ul style="list-style-type: none"> <li>Increased monthly income by average Rs 500/- to Rs1000/-</li> <li>Increased productivity</li> <li>53% families are investing saved time for pursuing activities for additional income</li> <li>Women health issues reduced</li> </ul>





“Initially, the residents of Buddhistswadi in Satvin village had to endure great difficulties to access drinking water. They had to walk 500 meters and carry water on their heads for drinking and daily use, which consumed almost half of their day and caused physical strain, leading to back, waist, and leg problems. Now, thanks to the project initiated by Gharda Company we are able to access water at our doorstep .”

- Women from Buddhistswadi,  
Satvin village

## Findings and Interpretation

This section focuses on how the program has impacted key areas such as access to drinking water, time spent on water collection, health improvements, and income generation activities.



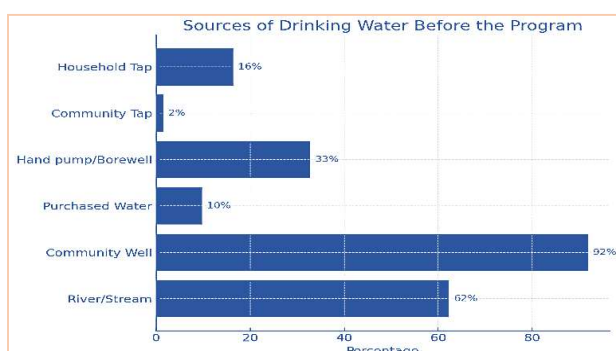
### SOURCES OF DRINKING WATER BEFORE AND AFTER THE PROGRAM

The intervention resulted in a substantial shift in the sources of drinking water, moving from sources like rivers and streams to more convenient household taps.

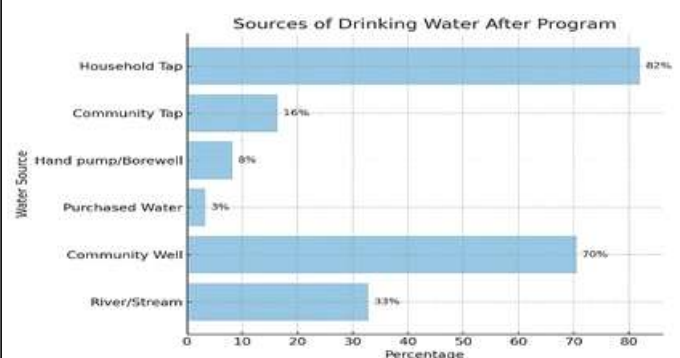
**Before the Program:** A significant portion of respondents (91.8%) relied on community wells, with 62.3% using rivers/streams, and 32.8% depending on hand pumps/borewells.

**After the Program:** Following the intervention, 82.0% of respondents now have access to household taps, marking a significant improvement in access to clean drinking water

#### Before



#### After



## Findings and Interpretation

Women highlighted how the availability of water at home has transformed their lives, saving them hours of effort and providing a more reliable water source.

**A 37 year old woman**

“Before, we had to go to the community well or stream. It would take hours, but now water comes right to our doorstep.”

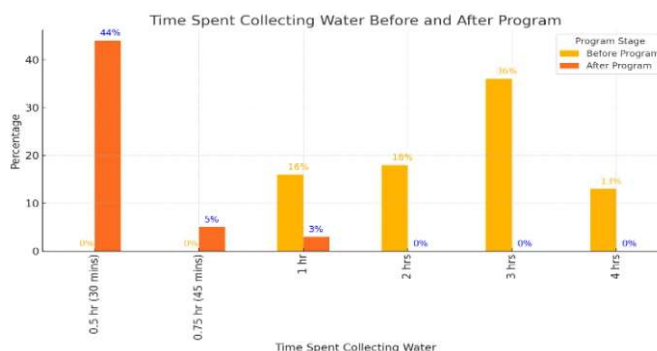
**A 42 year old woman**

“We used to wait in long queues at the well. Now, we don't have to do that anymore. It's a relief.”



### TIME SPENT COLLECTING WATER BEFORE AND AFTER THE PROGRAM

The time saved by accessing water within the household had a major impact on the daily routines of the respondents, particularly women.



#### Before the Program:

Many respondents reported spending between 2-4 hours daily collecting water, with 36% spending 3 hours or more.

#### After the Program:

The intervention led to a significant reduction in the time spent fetching water. 44% of respondents now spend just 30 minutes a day.

The time saved is now being used for farming, family responsibilities, or other productive activities. However, some women expressed interest in using this time to pursue new income-generating activities if opportunities were provided.

**A 37 year old woman**

“Now, with the tap at home, I don't have to walk long distances. It saves me so much time and energy.”

**A 42 year old woman**

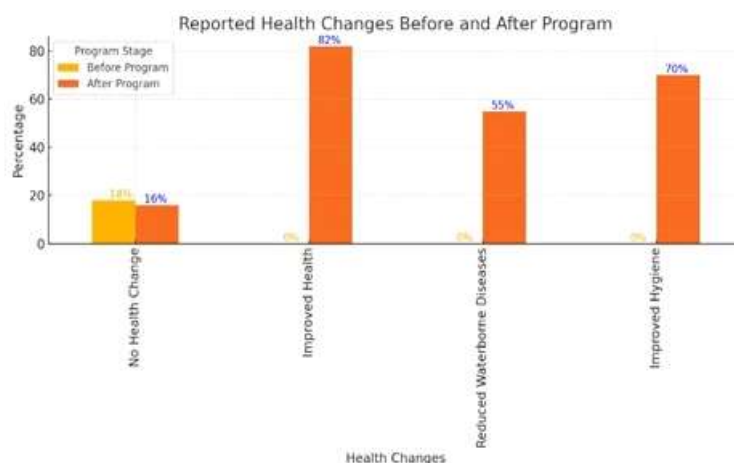
“Earlier, I had to wake up early to fetch water. Now I can use that time for something else like helping my children with their studies.”

## Findings and Interpretation



### HEALTH CHANGES BEFORE AND AFTER THE PROGRAM

Access to clean water has led to significant health improvements. With fewer cases of waterborne diseases and reduced physical strain, the community is healthier and more productive.



#### Before the Program:

Waterborne diseases such as diarrhoea and stomach infections were common due to unsafe water sources. The physical toll of carrying heavy water containers also led to frequent back, neck and joint pain among women.

#### After the Program:

82% of respondents reported improved health, with 55% experiencing fewer cases of waterborne diseases and 70% noting improved hygiene. The physical strain from carrying water has also reduced, contributing to better overall well-being.

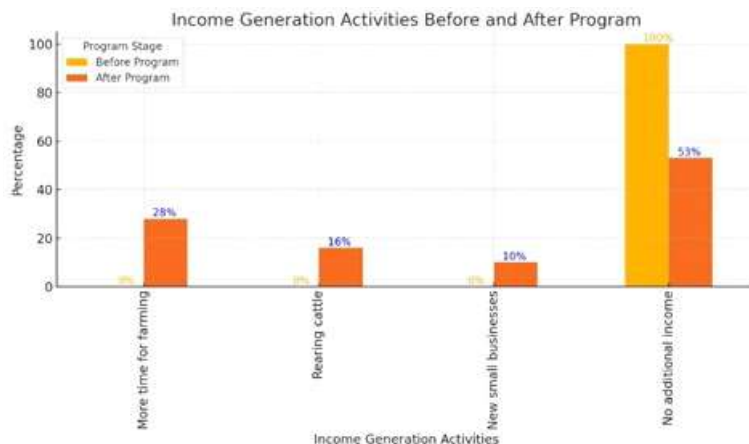
Women expressed relief from the physical burden of carrying water, which had previously caused long-term health issues.

## Findings and Interpretation



### INCOME GENERATION BEFORE AND AFTER THE PROGRAM

The program indirectly contributed to income generation by freeing up time that would otherwise have been spent collecting water. This time was instead used for productive activities, such as farming and livestock rearing



#### Before the Program:

A few respondents noted that, prior to the intervention, they were unable to engage in income-generating activities because of the considerable time spent daily collecting water.

#### After the Program:

Post-intervention, a significant number of respondents (28%) reported using the time saved from having water access at their doorstep to focus on farming activities, while 16% have taken up livestock rearing. However, many women expressed a desire to learn new skills to explore entrepreneurial opportunities.

#### A 45 year old woman

“We are mostly working in the fields. Even though educated, we do not have opportunities beyond daily wage work. If there were better chances, I'd avail them.”

#### A 38 year old woman

“With more time, I've been able to help with the farm, but I also want to learn something new, maybe start a small business.”

Inactive Self-Help Groups (SHGs) remain a barrier to greater economic empowerment, and women emphasized the need for training and better access to markets.

#### A 50 year old woman

“The SHGs aren't functioning. We need training and support to really make a difference. Otherwise, it's just farming and cattle rearing for us.”

#### A 38 year old woman

“I want to do something more than just farming. But we need proper training and guidance for that.”



## Overall Impact of the Program

Impact of the program can be summarized as follows:

### Improved Access to water

The transition from rivers, streams, and community wells to household taps has drastically improved water accessibility for 82% of households.

### Health Benefits

Reduced exposure to unsafe water sources has led to a 55% decrease in waterborne diseases, improving the health of families, particularly children.

### Time Savings

Women now spend significantly less time collecting water, with 44% of respondents spending just 30 minutes a day on this task, compared to 2-4 hours before the program began.

### Economic Potential

The time saved is being used for productive activities like farming and livestock rearing, but there remains a strong desire among women to engage in more diverse economic opportunities.

### Gender and Social Equity

Although the program reduced the burden on women, there is a continued need to address the restrictive gender roles that limit women's broader economic participation.



## CSR Projects

### Integrated Rural Development



#### B Environment Education

## Introduction

Oriearth Natures Foundation conducted awareness sessions about environmental issues in schools in Khed district. This initiative aims to address the lack of environmental awareness and engagement among students by implementing interactive, hands-on activities like bird watching, tree planting, waste management, and seed collection. By moving beyond textbook-based learning, the program fosters practical knowledge, enhances students' connection with nature, and encourages environmentally conscious behaviours in both school and home settings.

#### Problem Statement

The disconnect between students and the natural environment poses a significant challenge to developing a generation that is informed and proactive about environmental issues. Many students lack essential knowledge about planting, native tree species, and the importance of seeds, along with a poor understanding of biodiversity and conservation. This knowledge gap is further reflected in inadequate waste management, minimal energy conservation, and insensitivity to water usage. Additionally, the absence of peer influence and community involvement in environmental education, coupled with a reliance on textbook-based learning, limits hands-on experiences and real-world engagement. Addressing these issues is crucial for fostering a more environmentally conscious and active student body.

#### Intervention Undertaken

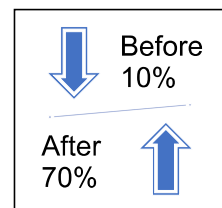
Implementing Organisation undertook the following activities with multi-fold objectives like interactive theory sessions on various environmental issues.

Interactive Theory Sessions	Action Oriented Activities
Bio Diversity and Importance	Plantation at school and community
Pollution and Measurements	Seed collection activity
Water Conservation	Bird watching and observations
Cleanliness and waste Management	Waste segregation and plastic collection
Electricity saving	Seed collection activity

Students were asked to share their experience and action taken post sessions. The Data was Analysed in the context of output of the projects

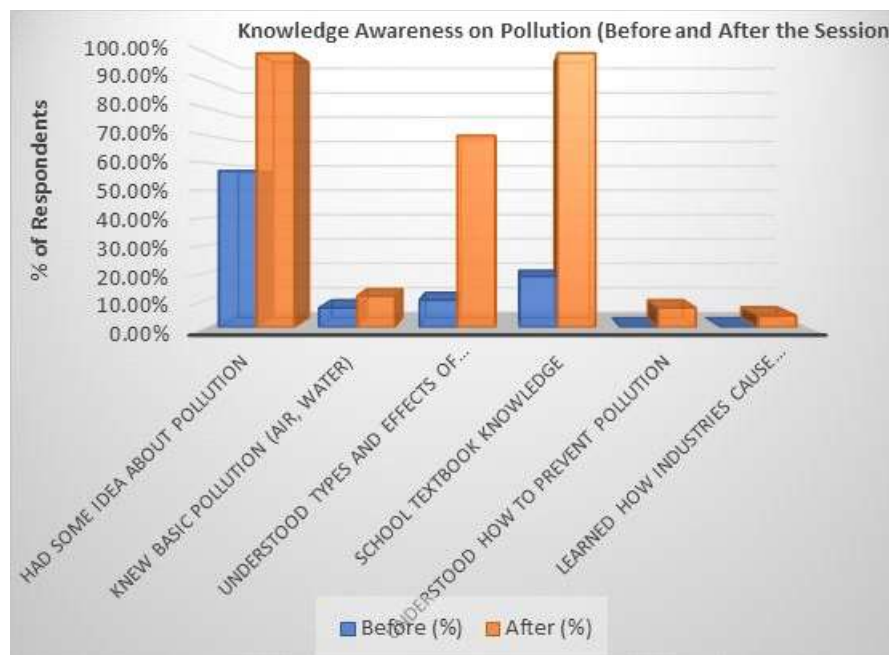
## Knowledge Awareness on Pollution (Before and After the Session)

To assess students' knowledge on various aspects of pollution, questions were asked about the types of pollution, its effects, prevention methods, and their main sources of information, including school textbooks. This approach was used to gauge their understanding before and after the sessions and to evaluate the overall change in their knowledge levels. A significant increase is noted in the percentage of students who understood types and effects of pollution (from 10% before to 70% after).



If students are not in class for 1 hour, they voluntarily take the initiative to switch off the classroom lights which has made a difference in the electricity bill (appx Rs. 65/- per month). There are 14 classes and each class has 2 to 3 fans and one or two tube lights depending on the length of the class. So, when the students are not there, they switch off the lights and fans.

The School Principal said “Our children used to go to the washroom and leave taps running, especially the younger ones. Now, we don't see that happening as much, and we can really feel the difference after project has been implemented”



**Teacher**

“Students started identifying sources of pollution in their surroundings and even shared this awareness with their parents.”



**Teacher**

“The combination of videos and group activities made students much more interested in the topics. They were not passive listeners but active participants.”

## Knowledge on Waste Management (Before and After the Session)

Students' knowledge of waste management was assessed by asking questions on topics such as waste segregation and disposal methods to evaluate their understanding. This was done to observe the change in their knowledge before and after the sessions. The data reveals a significant improvement in their awareness and understanding of waste management practices as a result of the knowledge gained through the sessions



A student of class IX shared: "I started separating dry and wet waste at home, and now my family is doing the same. We've even started composting."

## Knowledge on Tree Plantation (Before and After the Session)

As shown in the table below, the environmental sessions significantly improved students' knowledge of tree plantation. After the session, 51.4% of students demonstrated specific knowledge of tree plantation, compared to 11.4% before. Students mentioned that tree plantation is necessary for better oxygen levels, soil erosion, reducing temperature and its economic benefits.



**Principal**

"After learning about native trees, students initiated a school garden project, planting saplings and volunteering to care for them daily."



## Pollution

The program led to a substantial improvement in students' comprehension of pollution, with 70% of students reporting a thorough understanding of pollution types and effects after the session, up from just 10% prior to the program.



## Waste Management

Following the session, nearly half of the students (45.7%) demonstrated a solid grasp of waste management techniques, such as segregation and recycling, compared to only 8.6% before. The proportion of students with little to no knowledge of waste management dropped to near zero.



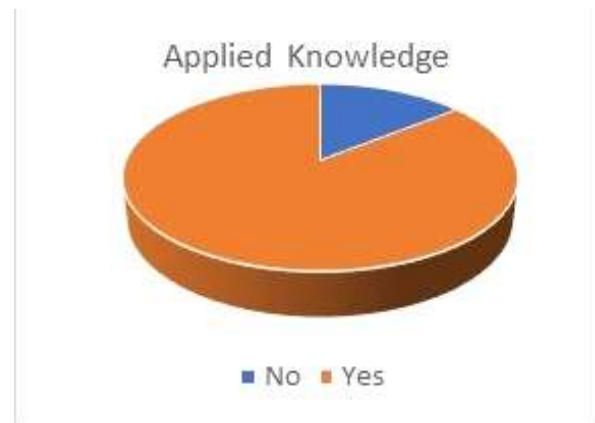
## Tree Plantation

The program significantly boosted students' understanding of tree plantation practices, with over 50% of participants gaining specific knowledge on planting and native tree species, a marked increase from just 11.4% before the session.



## Change in behaviour - Application of Knowledge Gained Through the Awareness Session

The study also assessed whether students applied the knowledge they gained through the awareness sessions in their school or home. As shown in the graph, a large majority (85.7%) of respondents reported applying the knowledge they acquired.



**Student:** "I now remind my parents and friends to save energy and water whenever I see them waste it."

**Teacher:** "Students are now actively involved in environmental initiatives at school, such as waste segregation and tree plantation drives."



**Teacher, Saraswati Shikshan Sanstha:** "It was encouraging to hear from students that they're applying what they learned at home and educating their families."

**Student, United English Medium School Chiplun:** "I make sure my family avoids using loudspeakers and we try to reduce air pollution in our village."

## How Knowledge On Identification Of Birds Was Applied

Highlights how students applied their knowledge about bird identification. Most students (60%) did not apply much, but a few mentioned creating bird books, identifying birds, and observing birds in their environment.



**Student:** “After learning about different birds, I now enjoy birdwatching with my family. We even made a small bird book.”

**Teacher, United English Medium School noted:** “The bird identification session inspired a few students to observe and record birds around their homes. This was a great way to connect them with local biodiversity.”

## How Knowledge On Waste Management Was Applied

Students applied the knowledge they gained on waste management by separating dry and wet waste. More than half of the students (55.7%) did not apply the knowledge, but some took proactive measures such as recycling and using separate bins for different types of waste.



**Student from Kavita Vinod Saraf High School.** “I started separating dry and wet waste at home and taught my siblings how to do it as well. We've also started composting food waste.”

**A teacher mentioned:** “Some students have taken the initiative to organize waste segregation in their neighbourhoods, which is a remarkable achievement.” This activity requires constant follow up and motivation to bring about the behavioural changes.

## Knowledge Gained from Seed Collection Activity

Knowledge Gained from Seed Collection Activity	Frequency	Percent
Identified different types of seeds	7	10.0%
Gained knowledge of seed use (coconut, rice, mango)	6	8.6%
Learned about seedballs and tree plantation	9	12.9%
Importance of seeds for tree growth and oxygen production	5	7.1%
NA/No response	7	10.0%
Other specific knowledge (e.g., strawberry seeds, plant structure)	7	10.0%
<b>Total</b>	<b>70</b>	<b>100.0%</b>

The majority of students reported gaining new knowledge about seeds, with 10% being able to identify different seed types, and 12.9% learning about seedballs and their role in tree plantation. Others learned about specific seeds, such as coconut, rice, and mango, as well as the importance of seeds for oxygen production and tree growth.



**Student, Hindavi Garjana English Medium School:** “The seed collection activity was my favourite. Now I understand the importance of seeds and even planted some at home.” -



**Teacher :** “The students were excited about collecting and learning about seeds. Many of them talked about starting small gardens at home with their families.”



## Knowledge Gained from Seed Collection Activity

Students plan to apply their newly acquired knowledge by creating home gardens and nurseries (45.7%) and participating in tree-planting and awareness activities (44.3%). Additionally, 42.9% of students plan to use seedball techniques in farming.

Future Plans for Seed Knowledge	Frequency	Percent
Apply knowledge in family and community (gardens, nurseries)	32	45.7%
Participate in future awareness and planting activities	31	44.3%
Use seedball knowledge for farming	30	42.9%
Share knowledge with others	6	8.6%
<b>Total</b>	<b>70</b>	<b>100.0%</b>

## Knowledge and behavioural changes with respect to water conservation practices

Water conservation knowledge gained during the sessions was highly impactful, with 95.7% of students learning to turn off taps when not in use, 85.7% learning to collect rainwater for reuse, and 81.4% learning to promptly fix leaks.

## Water Conservation Techniques Learned During Awareness Session

Water Conservation Techniques	Frequency	Percent
Turning off taps when not in use	67	95.7%
Collecting rainwater for reuse	60	85.7%
Fixing leaks promptly	57	81.4%
<b>Total</b>	<b>70</b>	<b>100.0%</b>



**Student, Saraswati Shikshan Sanstha:** “After the session, I make sure no one in my family leaves the tap running. We also collect rainwater for our plants now.”

**Teacher:** “Students are more conscious about water usage now. They've started advocating for water conservation within their homes and communities.”

## Key Insights

1. **Seed Knowledge:** Many students reported gaining a better understanding of seeds, with 10% identifying different seed types and 12.9% learning how to make and use seedballs for plantation.
2. **Future Application:** Students are eager to apply this knowledge in practical ways, such as creating home gardens, nurseries, and participating in future tree-planting initiatives.
3. **Water Conservation:** Nearly all students learned essential water conservation techniques, including turning off taps and collecting rainwater, with over 80% taking away actionable steps to conserve water at home and school.

## Water Conservation Practices at School (Before and After Awareness Session)

Water Conservation Practices at School	Before (%)	After (%)
Regularly checking for and repairing leaks	64.3%	91.4%
Educating students about water conservation	52.9%	88.6%
Collecting rainwater for school garden	52.9%	90.0%
<b>Total</b>	<b>70</b>	<b>100.0%</b>

After the awareness sessions, significant improvements were noted in water conservation practices. The proportion of schools regularly checking for and repairing leaks increased from 64.3% to 91.4%, while education on water conservation grew from 52.9% to 88.6%. Schools collecting rainwater for garden use also increased from 44.3% to 90.0%.



**Principal, Kavita Vinod Saraf High School:** “Students are now more involved in maintaining the school's garden and ensuring that water isn't wasted.”

**Student** “We check for leaks regularly at school, and if we find any, we report them immediately.”

At home, the awareness sessions resulted in a marked increase in rainwater collection (64.3% to 88.6%) and continued practices of reducing water use and fixing leaks, showing consistent high levels before and after the sessions.

## Water Conservation Practices at Home (Before and After Awareness Session)

Water Conservation Practices at Home	Before (%)	After (%)
Collecting and using rainwater	64.3%	88.6%
Reducing water use during bathing/washing	84.3%	87.1%
Fixing leaks in pipes	88.6%	88.6%



**A student shared:** “My family now saves rainwater, and we use it for our plants and for washing the car. It was something we never thought of before the program.”

## Water Use Behaviour at School (Before and After Awareness Session)

Water Use Behaviour at School	Before (%)	After (%)
Reduced water usage significantly	62.9	87.1
Saved water at home	1.4	4.3
Engaged in rainwater harvesting	2.9	2.9
Avoided water wastage	1.4	2.9
Reusing water	0.0	2.9

The knowledge awareness sessions on water conservation demonstrated a significant positive impact on participants' behaviour. The proportion of individuals who reported reducing water usage significantly increased from 62.9% to 87.1%, reflecting a heightened awareness of responsible water use. Similarly, practices such as engaging in rainwater harvesting and reusing water saw notable improvements, with engagement in rainwater harvesting increasing from 1.4% to 4.3%, and water reuse rising from 0.0% to 2.9%. Avoidance of water wastage also improved marginally. These changes indicate that the sessions successfully influenced participants to adopt more sustainable water use practices, addressing key areas of conservation and resource management.



“I've learned to be mindful about water use. I used to leave the tap running, but now I turn it off as soon as I'm done.” - **Student from United English Medium School Chiplun.**

## Key Insights

1. **Water Conservation Practices:** The awareness sessions resulted in substantial improvements in both schools and homes. Key practices such as checking for leaks and rainwater collection saw significant increases.
2. **Behaviour Change:** Student's water use behaviour showed a strong positive shift, with more students using less water at both school and home.
3. **Continued High Practices:** Consistent levels of water conservation practices, such as fixing leaks and reducing water use during bathing, were maintained after the awareness sessions.

## Knowledge on Energy Sources and Awareness

Students' knowledge of energy sources saw a remarkable increase following the program. After the session, 88.6% of students learned about different energy sources, and 91.4% gained knowledge about renewable sources such as solar and wind energy.

Knowledge Area	Before (%)	After (%)
Learned about different energy sources	11.4%	88.6%
Knowledge of renewable energy sources (solar, wind)	8.6%	91.4%
Knowledge of non-renewable energy sources (coal, oil)	18.6%	81.4%

## Qualitative Insights:



**Student, Rotary English Medium School:** “I didn't know much about renewable energy before, but now I understand how important it is to use solar and wind power. I told my parents we should think about installing solar panels.”

**Teacher:** “The students are now more conscious about the impact of energy use. They've started asking questions about how we can make our school more energy-efficient.”

## ENERGY CONSERVATION PRACTICES BEFORE AND AFTER THE PROGRAM

The energy conservation practices at both school and home significantly improved after the program. At school, 91.4% of students reported turning off lights and computers when not in use, compared to 54.3% before the session. At home, the increase was similarly notable, with 88.6% practicing energy conservation compared to 48.6% before the session.

### Energy Conservation Practices Before and After the Program

Energy Conservation Practice	Before (%)	After (%)
Turning off lights and computers (School)	54.3%	91.4%
Encouraging students to save energy (School)	50.0%	91.4%
Turning off lights and computers (Home)	48.6%	88.6%
Encouraging family to save energy (Home)	55.7%	94.3%

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### Qualitative Insight:



**Student, SPM English Medium School:** “After the program, I always remind my family to turn off the lights and fans when we're not using them. It's become a habit for all of us.”

**Teacher:** “The awareness sessions inspired the students to become ambassadors of energy conservation. They not only adopted these habits but also spread the message to their families and communities.”

## Influence Of Energy Conservation Program On Daily Routine

The energy conservation program had a substantial influence on students' daily routine. After the program, 91.4% of students made more efforts to save energy in their daily activities, and 88.6% reported reminding family members to save energy.

## Influence of Energy Conservation Program on Daily Routine

Impact on Routine	Before (%)	After (%)
Making more efforts to save energy	8.6%	91.4%
Reminding family and friends to save energy	11.4%	88.6%
No noticeable change in routine	68.6%	31.4%

## Qualitative Insights:



**Student, Saraswati Shikshan Sanstha:** “I've become more careful about how much energy I use, and I always remind my family to turn off unused appliances. It feels good to make a difference.” -

**Teacher:** “The program not only changed students' behaviour but also empowered them to influence their families and peers, creating a broader impact beyond the classroom.”



## Influence of Energy Conservation Program on Daily Routine

### Knowledge Change:



- **Pollution Awareness:** Understanding of pollution types increased from 10% to 70%.
- **Waste Management:** Practical knowledge of waste segregation improved from 8.6% to 45.7%.
- **Tree Plantation:** Specific knowledge of tree planting grew from 11.4% to 51.4%

### Behavioral Impact:



- **Energy Conservation:** 91.4% now turn off lights and computers when not in use (up from 54.3%).
- **Water Conservation:** 87.1% reported using less water post-session (up from 62.9%).

### Application of Learning:



- **Seed Collection:** 45.7% planned to apply seed knowledge in home/community gardens.
- **Waste Management:** 44.3% of students actively segregated waste at school and home.

### Community Engagement:



- **Ripple Effect:** 88.6% of students shared environmental lessons with family and friends.
- **Parental Involvement:** Teachers and principals reported increased community participation in tree-planting activities.

### Sustainability of Actions:



- **Long-Term Practices:** Schools maintained high levels of water and energy conservation after the sessions.
- **Continued Adoption:** Monitoring and regular feedback encouraged long-term sustainability.

Outcome	Impact
<ul style="list-style-type: none"> <li>Increased student engagement, hands on experience e.g. Students participated in identifying bird species by listening to their sounds.</li> <li>Students nurture saplings and track growth, fostering a sense of ownership</li> <li>Identify different seeds types and learnt to make seedballs for plantation</li> <li>Students became more conscious of waste disposable habits</li> <li>45% of the students started segregating waste at home and school</li> <li>Deliberate efforts to switch off lights during break time at school.</li> <li>At home unplug the gadget when not in use especially mobile chargers</li> <li>Use of less water at school and home by students</li> <li>Informing school authorities if any water leaks observed by students in washrooms pipe / taps</li> <li>Reduced water usage during bathing, limiting to one bucket instead of two buckets</li> <li>Engaged non-participating students by spreading awareness and knowledge on environmental education sessions through an exhibition of models</li> <li>The cultural activities attracted community members drawing attention to environmental issues.</li> <li>Increased student understanding of real-world environmental issues</li> </ul>	<ul style="list-style-type: none"> <li>Enhanced environmental awareness and observational skills</li> <li>Students initiated school garden project, planting saplings and taking care, indicates sense of responsibility gradually developing towards environment</li> <li>Students are eager to apply knowledge gained in future by creating home gardens</li> <li>Reduced waste generation, improved cleanliness, and environmental responsibility</li> <li>Some students started composting food waste at home</li> <li>Expenses of Brooms reduced by Rs 150/- per month</li> <li>Laborious work of school peons to collect wrappers reduced</li> <li>Reduction in monthly electricity bill around Rs 65/- in schools</li> <li>At home electricity bill reduced by Rs 50/-</li> <li>Rain water collected in drums used for watering plants</li> <li>At home water collected in buckets and used for watering plants and household work</li> <li>Wider spread of knowledge across all students from school</li> <li>These performances helped spread awareness, gradually influencing the community to engage in sustainable efforts and adopt eco-friendly practices</li> <li>More meaningful learning and stronger student engagement</li> </ul>



## Recommendations

### Expand the Program's Reach:

- Include more schools and students and also the community to amplify the program's impact.
- **Introduce New Educational Tools:** -Add water quality testing kits and vermicomposting units to enhance practical learning.
- **Strengthen Community Engagement:** Increase parental and local community involvement in environmental activities
- **Continuous Monitoring and Feedback:** Regular feedback and monitoring systems to sustain positive environmental practices.
- **Integrate with School Curricula:** Embed environmental education into the daily school curriculum for long-term adoption.



## CSR Projects

### Integrated Rural Development

**C**

## School Support

## Introduction

Initiatives at the school have introduced significant improvements to the infrastructure and learning resources. These include the establishment of a well-equipped science lab, the provision of movable projectors, and upgrades to drinking water and toilet facilities. The aim was to enhance students' scientific understanding and ensure a healthier, more supportive learning environment.

### Objectives of the study

- To evaluate the effectiveness of science labs and projectors in improving student's academic performance.
- To assess the impact of improved sanitation and drinking water on student's health and school attendance.
- To provide recommendations for sustaining and scaling the interventions.

A comprehensive overview of the project's key aspects, including the identified problems, the implemented interventions, and their outcomes, are emphasized. It highlights how these interventions address specific issues and the resulting impact on students' learning experiences and overall well-being.

## A) Drinking Water Facility

Access to clean and reliable water is essential for maintaining health, hygiene, and the overall well-being of students in schools. The installation of a water facility aims to ensure that students have continuous access to safe drinking water, thereby supporting their hydration, hygiene, and learning environment. This assessment evaluates the current water facility, its challenges, and offers recommendations for improvement.

**Improved Health Outcomes:** Students and teachers noticed a significant difference in their health

**Previously, we hesitated to drink water at school as it was muddy and unclean. After installing the water tank, we now have access to clean water, allowing us to refill our bottles and stay hydrated throughout the day.**

## B) Science Laboratory and Projector

An interactive science laboratory and a movable projector are essential tools for creating an engaging and hands-on learning environment. This analysis evaluates the utilization and impact of these facilities, focusing on improving access and fostering a more exploratory learning experience.

**Improved Academic Performance:** Students mentioned how hands-on experiments improved their understanding

**"Yes, with the help of these models we can explain the concepts in a better way, and during exams, it helps us to remember the lessons better."**

## Enhanced Conceptual Clarity: Students clearly preferred visual learning aids

"The projectors make it easier to understand the subjects, especially when we didn't understand something in class, we can watch it on the projector again.

"Projectors are really helpful, especially in science. I understand everything better now."

## Increased Student Engagement: The interactive nature of projector-based learning boosted student involvement

"We use the projector for science lessons, and we prefer it because the pictures make things easier to understand."

"We get to see things visually, and that's what I like the most about learning with the projector."

## Health and Hygiene Benefits: The students felt more comfortable using the new toilets

"Earlier, the toilets were dark and unsafe, and sometimes with scorpions and snakes, but now they are well-lit and clean, and we aren't afraid to use them."

"We can now use the toilet whenever we want, even during our periods, because it's clean and there's running water."

## C) Toilet Construction

### Introduction

Toilet construction plays a critical role in improving sanitation and hygiene within schools, directly impacting the health and well-being of students. This assessment highlights the objectives of building adequate sanitation facilities, along with the findings on usage and maintenance, and provides recommendations to ensure sustainable and hygienic practices for long-term benefits.

### Snapshot of Key Outcomes

Project Component	Challenges Before Intervention	Intervention	Outcomes	Impact
Science Laboratories	Limited hands-on learning opportunities in science	Installed 50 scientific apparatus	Improved understanding of scientific concepts, increased interest in science subject	Improved understanding of science concepts, increased interest Increased school enrolment from 107 to 128 Participation in science exhibition at taluka level
Projector Use	Difficulty in understanding complex subjects	Introduction of two movable projectors	Enhanced conceptual clarity, increased engagement, and improved retention. Students can independently revisit complex topics	Enhanced conceptual clarity, increased student engagement
Toilets	Unhygienic and unsafe toilets, lack of privacy for female students	Construction of modern toilet facilities	Improved hygiene and comfort, increased attendance, especially for girls. Boys and Girls can now use the toilet alone, enhancing the privacy unlike before they had to go in groups due to fear of snakes and scorpions	Improved hygiene, increased attendance, especially among girls
Drinking Water	Contaminated water, health risks, and dehydration	Installation of clean drinking water systems	Reduced health risks, improved hydration, and better student well-being  Students without any worry refill water bottles in school  Improved water intake e.g. they refill again one bottle in school	Reduced health risks, improved hydration, better student well-being



## Future Recommendations:

Key Findings	Recommendations
Limited Access to Science Labs: Students had limited opportunities to engage with scientific apparatus	Increase the frequency of lab sessions to allow more hands-on learning experiences
Infrequent Use of Projectors: Projectors were primarily used for science subjects	Extend the use of projectors to other subjects like history and math for a more comprehensive learning experience
Maintenance Concerns for Toilets and Water Systems: Long-term sustainability of the facilities was questioned by students and staff.	Ensure regular maintenance of toilets and water systems to maintain health benefits
Extended Benefits to Families: Students brought clean water home, benefiting their families	Engage the community in maintaining infrastructure to ensure long-term sustainability and foster a sense of ownership
Student Engagement in Learning: Students found science labs and projectors highly engaging and effective	Expand the use of visual aids and hands-on tools in more subjects to enhance learning across the board



## CSR Projects

### Integrated Rural Development



#### A Adolescent Health

## Introduction

The Adolescent Health Care Project aimed to address critical gaps in health awareness and practices among adolescents, particularly focusing on menstrual hygiene, anaemia prevention, and Urinary Tract Infections (UTI) awareness. Through targeted educational interventions, the project empowered adolescents with knowledge and fostered positive behavioural changes, improving their overall health and well-being.

The primary objectives of this impact assessment study are:

- To evaluate the effectiveness of the Adolescent Health Care Project in improving menstrual hygiene practices among adolescent girls.
- To assess the increase in awareness about anaemia, including its causes, symptoms, and preventive measures.
- To determine the impact of the program on UTI prevention and general hygiene practices.
- To analyse the distribution and usage of sanitary pads produced by the local production unit established under the project.
- To provide actionable recommendations for scaling up the project and enhancing its effectiveness.

Area of focus	Problem statement	Intervention	Outcome	Impact
Menstrual hygiene	Only 2.5% of adolescents had knowledge of menstrual hygiene. Practices were influenced by cultural and religious beliefs	Educational sessions to provide menstrual hygiene knowledge and promote the use of sanitary pads	100% of adolescent girls gained knowledge about menstrual hygiene. Shift towards modern hygienic practices with 97.5% using sanitary pads post intervention	Increased, confidence in discussion about menstruation Improved hygiene practices eg to change sanitary pad at least twice in a day
Anaemia Awareness	Only 25% adolescents were aware of anaemia symptoms and the need for proper nutrition	Educational sessions on anaemia, its symptoms, and preventive methods	100% of adolescents gained awareness of anaemia symptoms  93% could identify key symptoms such as weakness and 100% began consuming iron-rich foods e.g. spinach, drum stick leaves vegetable and supplements post intervention	Improved knowledge of anaemia and actual application, healthier dietary choices, and proactive health management to prevent anaemia
UTI Intervention	Limited awareness of Urinary tract infection Adolescent Health Care District: Bharuch Implementing Partner: Gram Vikas Trust (UTIs) and poor hygiene	Educational sessions on UTI prevention and hygiene practices	100% of adolescents gained knowledge about UTI symptoms and prevention methods Improved hygiene practices to prevent UTIs such as drinking more water and maintaining cleanliness	Reduction in UTI risks through adoption of healthier hygiene behaviours, with adolescents feeling more informed and proactive in managing their health
School Attendance	30% of respondents reported school absenteeism due to menstruation	Improved menstrual hygiene education and access to sanitary products	95% of adolescents reported no school absences related to menstruation after the intervention	Increased school attendance during menstruation

Area of focus	Problem statement	Intervention	Outcome	Impact
Sanitary Pad Usage	<p>Many adolescents, especially those out-of-school, relied on cloth for menstrual protection</p> <p>Due to increase in cost from Rs 15/- to Rs45/- women have gone back to using cloth so that their daughters can use sanitary pads</p>	Distribution of sanitary pads produced by the local production unit	<p>97.5% of adolescents shifted to using sanitary pads post-program, with cloth usage eliminated among out-of-school adolescents</p> <p>Increased use of cloth</p> <p>Economic strain</p> <p>Reduced Accessibility to Modern Hygiene Products</p>	The use of cloth, particularly if not cleaned and dried properly, increases the risk of infections, rashes, and reproductive health issues
Behavioural change	Secrecy and stigma around menstruation limited discussions on menstrual health	Sessions encouraged adolescents to talk openly about menstrual health with peers and family members	Adolescents began engaging in open conversations about menstruation, breaking the stigma and fostering a supportive environment	Sustainable behaviour changes that promote ongoing dialogue and support for menstrual hygiene and reproductive health

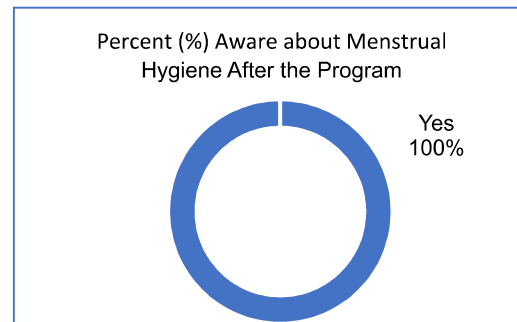
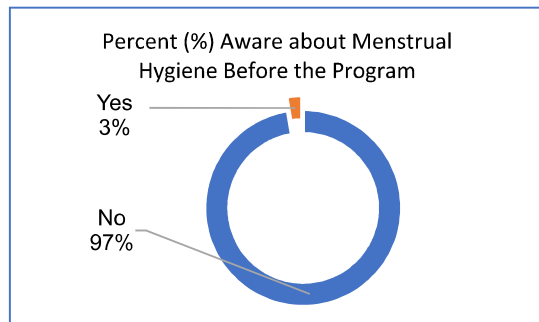




## Key Findings

### Awareness and Knowledge Before and After the Program

Prior to the intervention, only 2.5% of the adolescents had any knowledge of menstrual hygiene, highlighting a significant gap in essential health education. The program effectively bridged this gap, with 100% of the respondents reporting that they had gained knowledge about menstrual hygiene after participating in the program. This dramatic increase underscores the program's success in educating adolescents about a crucial aspect of their health.



Cultural and religious practices heavily influenced their behaviour during menstruation, often leading to inadequate hygiene practices. Before the educational session, participants had limited guidance on how frequently to change sanitary pads or maintain hygiene, except for bathing in the morning and evening.



"We were only told to bathe and change pads every six hours, but nothing about how to properly dispose them off."

Additionally, the sessions addressed traditional beliefs that often led to harmful practices, such as avoiding religious activities during menstruation. A participant shared, "My mother would tell me not to go to the temple or touch anything in the kitchen because I was 'impure' during those days." These insights indicate a shift towards more informed and health-conscious behaviour post-intervention.

The program effectively bridged this knowledge gap, with 100% of the respondents reporting an increase in their understanding of menstruation as a biological process and also about the menstrual hygiene after participating in the program. This dramatic improvement underscores the program's success in providing essential health education.

## Changes in Practices and Behaviours

The program not only increased awareness but also translated this knowledge into tangible behavioural changes. All 40 respondents reported improvements in personal hygiene during menstruation, adoption of a balanced diet, and an increase in physical activity, highlighting the comprehensive impact of the program. These changes are critical for improving overall health and well-being, particularly in the adolescent population, which is at a formative stage of life.

Participants highlighted the impact of peer influence in adopting these practices. Peer reinforcement played a significant role in sustaining the behaviour changes initiated by the program.



"Seeing my friends start using pads regularly made me feel more confident in doing the same."

## Accessibility and Affordability of Menstrual Products

Nature of Protection	Cloth	Sanitary Pad	Both	Total
<b>Before</b>				
Community (Out-of-school)	10 (50%)	10 (50%)	0 (0%)	20 (100%)
School-going	4 (20%)	17 (85%)	0 (0%)	20 (100%)
<b>Total Before</b>	14 (35%)	27 (67.5%)	0 (0%)	40 (100%)
<b>After</b>				
Community (Out-of-school)	0 (0%)	20 (100%)	0 (0%)	20 (100%)
School-going	0 (0%)	19 (95%)	1 (5%)	20 (100%)
<b>Total After</b>	0 (0%)	39 (97.5%)	1 (2.5%)	40 (100%)

The table shows a significant shift in menstrual protection methods used by adolescents before and after the intervention. Initially, 35% of adolescents used cloth, while 67.5% used sanitary pads. After the program, all adolescents transitioned away from cloth, with 97.5% exclusively using sanitary pads and 2.5% using both cloth and sanitary pads. This indicates the program's success in promoting the use of more hygienic menstrual products, particularly among out-of-school adolescents, where cloth usage was completely eliminated.



"The pads we receive through the program are affordable, but during emergencies, we often have to purchase pads from outside (chemist shop), which are expensive. As a result, we sometimes have to switch back to using cloth."

However, despite these improvements, some challenges persist. **Affordability remains a key issue**, as some participants still revert to using cloth due to the cost of sanitary pads. This economic barrier underscores the need for continued support and possibly subsidies to ensure consistent access to sanitary products. There is also a need to emphasize the **need for sustained efforts to make sanitary products more affordable and accessible beyond the program's duration**.

### Impact on School Attendance and Participation in Activities

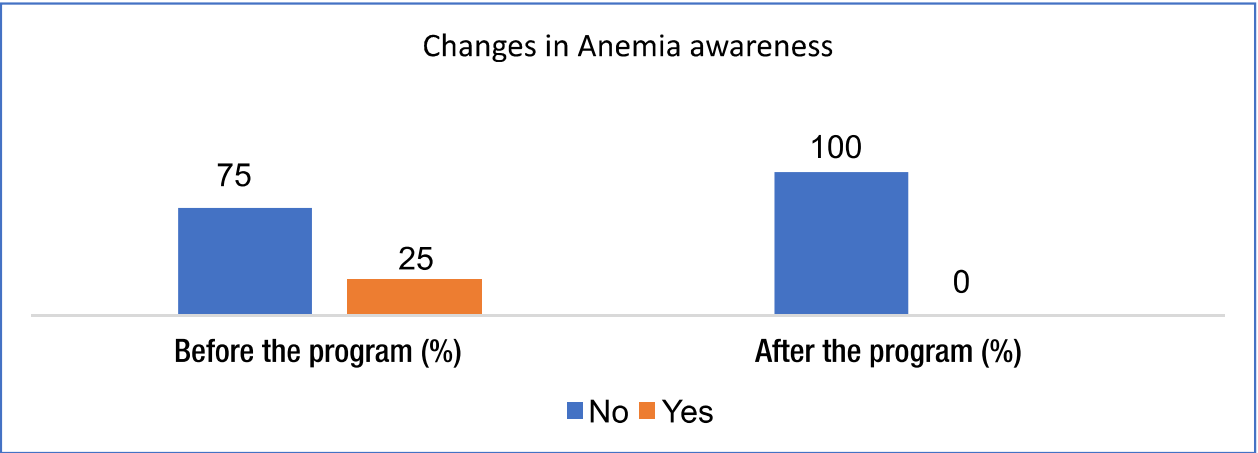
Menstrual issues were a significant barrier to school attendance before the program, with 30% of respondents reporting absences due to menstruation. After the intervention, 95% of the adolescents reported no school absences related to menstruation, demonstrating the program's effectiveness in reducing this barrier to education.

This improvement is particularly important as it suggests that better menstrual hygiene management can have a direct positive impact on educational outcomes for adolescent girls

### Anaemia Awareness and Screening

#### Baseline Knowledge and Changes Post-Program

Before the intervention, only 25% of the respondents were aware of the symptoms of anaemia, reflecting a significant lack of knowledge about this common health issue. This gap in awareness was a critical concern, especially since anaemia is particularly prevalent among adolescent girls, who are at a higher risk due to nutritional deficiencies and other factors.



After participating in the program, all adolescents reported awareness of anaemia and its symptoms, demonstrating the program's effectiveness in enhancing health literacy. The increased awareness is crucial for the early identification and management of anaemia, which can have significant long-term health benefits.

The highest awareness was related to the symptom of weakness, recognized by 93% of respondents. Other common symptoms identified include loss of weight (53%), shortness of breath (50%).

## Dietary Changes and Health Practices

In response to anaemia screening and education, significant changes were observed in the dietary habits and health practices of the participants. All 40 adolescents incorporated iron-rich foods into their diets, began taking iron supplements, and adopted regular exercise routines. These changes are essential for preventing and managing anaemia, particularly in adolescent girls who are in a critical stage of growth and development. The program's focus on practical dietary advice, such as including more green leafy vegetables, lentils, and iron-fortified foods, empowered the girls to take proactive steps in improving their health.

## Awareness of UTI Symptoms and Prevention Methods

Before the program, there was a limited understanding of Urinary Tract Infections (UTIs) among the adolescents. However, post-program, all respondents were knowledgeable about the symptoms and prevention methods of UTIs. This indicates that the program successfully addressed a critical gap in the health knowledge of these adolescents, equipping them with the information necessary to prevent UTIs.

## Changes in Hygiene Practices

As a result of the program, all respondents adopted improved hygiene practices to prevent UTIs, such as maintaining cleanliness, drinking sufficient water, and not holding in urine for prolonged periods. These practices are crucial in reducing the incidence of UTIs, which can have significant health implications if not managed properly.



"I used to ignore the need to drink more water, but now I make sure to stay hydrated to avoid any problems."



"We learned that holding urine for too long is not good, so I make sure to go whenever I need to."

## Distribution of Sanitary Pads

### Coverage and Impact on Menstrual Hygiene Management

The distribution of sanitary pads through the program had a profound impact on menstrual hygiene management among the respondents. Before the intervention, a significant proportion of adolescents relied on cloth, which is less hygienic and can lead to infections. However, after receiving sanitary pads through the program, there was a marked shift towards using these safer alternatives. Specifically, 92.5% of the adolescents reported using sanitary pads regularly after the program.



This shift not only improved the overall hygiene of the participants but also helped reduce the stigma associated with menstruation by promoting modern menstrual hygiene practices. The availability of sanitary pads played a crucial role in enhancing the confidence and comfort of the adolescents, enabling them to participate more fully in daily activities, including attending school without fear or discomfort.

## Behavioural and Attitudinal Changes

### Shifts in Attitudes Towards Menstrual Hygiene and General Health

The program led to significant positive shifts in attitudes towards menstrual hygiene and general health among the adolescents. Prior to the intervention, menstrual hygiene was often shrouded in secrecy and stigma, which limited open discussions and the adoption of healthy practices. Following the program, there was a noticeable change in how adolescents perceived and managed menstruation. They became more open to discussing menstrual hygiene, both within their peer groups and with family members. This openness is crucial for breaking down the taboos that traditionally surround menstruation and for fostering a more supportive environment where adolescents feel empowered to manage their health effectively.

### Discussions About Menstrual Health with Peers and Family

One of the key behavioural changes observed was the increase in discussions about menstrual health among peers and with family members. The program encouraged adolescents to engage in conversations about menstruation, which were previously considered taboo. This shift not only helped in normalizing the subject of menstruation but also enabled the sharing of knowledge and experiences, thereby reinforcing the lessons learned during the program. These discussions are vital for sustaining the behavioural changes initiated by the program, as they help to build a community of support that can address challenges and provide guidance on menstrual hygiene.

#### Cultural and Societal Norms

Traditional beliefs such as viewing menstruation as impure.

Restrictions on daily activities during menstruation, like not entering the kitchen or participating in religious activities

Difficulty in adopting new practices due to entrenched norms.

#### Accessibility and Availability of Resources

Limited access to affordable sanitary pads in rural areas.

Dependence on program-distributed menstrual hygiene products.

Economic constraints hindering continuous access to sanitary pads post-program.

#### Stigma and Misconceptions

Persistent stigma surrounding menstruation, leading to feelings of shame and embarrassment.

Misconceptions about menstruation and reproductive health, affecting the adoption of healthy practices.

Ongoing negative attitudes that prevent open discussions and education about menstrual health.

Area of Impact	Key Quantitative Findings	Key Qualitative Insights
Menstrual Hygiene Management	100% of adolescents reported increased knowledge on Menstrual Hygiene Management post-program	Cultural norms were a significant barrier, but the program initiated a shift in attitudes. Participants felt more confident discussing menstruation openly.
Anaemia Awareness	100% awareness on Anaemia Awareness post-program.	Participants gained a better understanding of anaemia symptoms and the importance of a balanced diet.
UTI Prevention	100% awareness of UTI symptoms and prevention post-program.	Improved hygiene practices were adopted, reducing the risk of UTIs.
School Attendance	95% of adolescents reported no school absences post-program	Participants felt more comfortable attending school during menstruation, which reduced absenteeism significantly.
Sanitary Pad Usage	92.5% regular use of sanitary pads post-program.	Affordability remains a concern, with some participants reverting to cloth due to the high cost of pads.

### Recommendations for Scaling Up the Project:

- **Forge Partnerships for Expansion:** Collaborate with local governments, NGOs, and private sector entities to expand the project's reach and resources, allowing for a broader impact.
- **Integrate the Program into School Curriculums:** Ensure sustainability by embedding the program into school curriculums, so future generations receive continuous education on menstrual hygiene and reproductive health.
- **Implement Continuous Monitoring and Evaluation:** Establish regular monitoring and evaluation mechanisms to assess the program's impact, identify areas for improvement, and make data-driven adjustments.

### Broaden Scope

- Expand the educational content to include comprehensive sexual health education, nutritional guidance, and mental well-being support.

### Interactive Learning Methods

- Introduce peer education programs and role-playing exercises to make the learning experience more engaging and effective for adolescents.

### Enhance Access & Reduce Stigma

- Establish community-based distribution centers to ensure continuous access to affordable menstrual products, and actively involve parents and community leaders to help reduce stigma and support healthy practices.



### **Scale-Up Initiatives**

- Develop strategic partnerships with local governments, NGOs, and the private sector to scale up the program, and integrate it into school curriculums to provide sustainable education on menstrual hygiene and reproductive health.

### **Ensure Sustainability**

- Implement continuous monitoring and ongoing evaluation processes to track progress and make necessary adjustments to the program, ensuring its long-term success and impact.

## CSR Projects

### Integrated Rural Development



## A

Implementing Partner - BAIF

## Introduction

Gharda Chemicals Limited, known for its innovative contributions to the chemical industry, has undertaken various CSR initiatives aimed at improving rural livelihoods. The Artificial Insemination (AI) program, in collaboration with BAIF, was initiated to promote sustainable livestock management and improve the economic conditions of farmers in targeted regions. Given that the AI program was adopted by most farmers within the last year, this assessment focuses on understanding early indicators of impact, particularly changes in awareness, adoption, and potential economic benefits.

### Program Objectives:

1. To increase farmers' awareness and adoption of Artificial Insemination (AI) technology.
2. To promote sustainable livestock management practices to improve cattle genetics.
3. To enhance livestock productivity, particularly in milk production.
4. To generate economic benefits for farmers through increased market opportunities.

### Program Intervention:

1. **Awareness Campaigns and Training:** Conducted targeted campaigns and hands-on training sessions to educate farmers on Artificial Insemination (AI) technology, emphasizing its benefits for livestock productivity and economic gains.
2. **Subsidized AI Technology:** Provided sorted semen to farmers at a subsidized rate of Rs 650/- to promote AI adoption and improve cattle genetics.
3. **Support for Fodder Management:** Distributed 2 sticks of stumps at a highly subsidized price of 10 paise to support farmers in growing fodder for their livestock.

### Problem statement

The program to introduce Artificial Insemination (AI) technology to farmers faces several barriers, including low awareness and zero adoption, high implementation costs, limited fodder-growing space, and restricted market access. These challenges prevent farmers from benefiting from AI's potential to improve milk production, cattle genetics, and livelihoods. Consequently, the program's goal of enhancing farm productivity and income remains unachieved.

### Objectives of the Study:

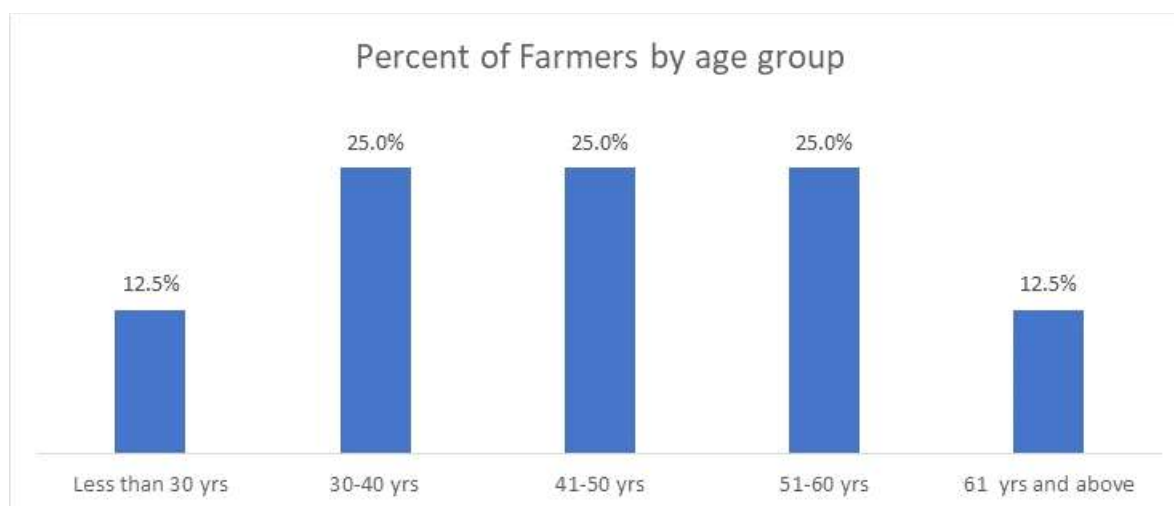
This impact assessment study was conducted to evaluate the initial effectiveness of the AI program, focusing on:

- The level of awareness and adoption of AI techniques among farmers.
- Early signs of economic benefits, including potential increases in income and livestock productivity.
- Challenges faced during the early stages of implementation.

## Findings of the Study

### Profile of the Farmers - Age Distribution of Farmers

The age distribution of the farmers reflects a broad range, with a notable concentration in the 30-50 years age group. This age group is often the most active in farming, combining both experience and physical ability to adopt and implement new technologies like AI.



The strong representation of middle-aged farmers (30-60 years) indicates that this demography is both capable and motivated to invest in new technologies that enhance productivity. These farmers often have the experience and resources necessary to make the most of AI technology.

Middle-aged farmers typically balance experience with physical capability, making them ideal candidates for adopting AI. As one respondent noted, "I have been farming for over 20 years, and now with AI, I can see a tangible improvement in my livestock's productivity. It's a worthy investment for my family's future."

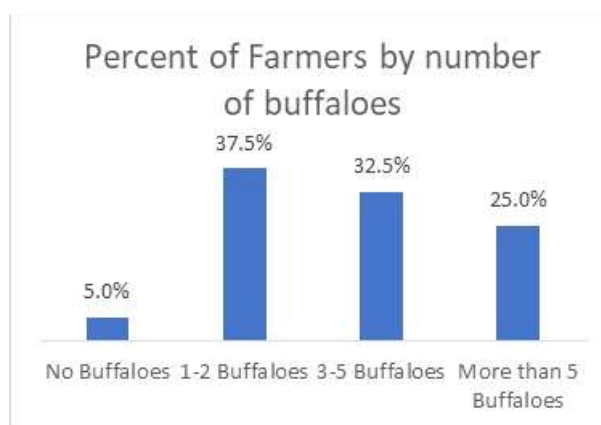
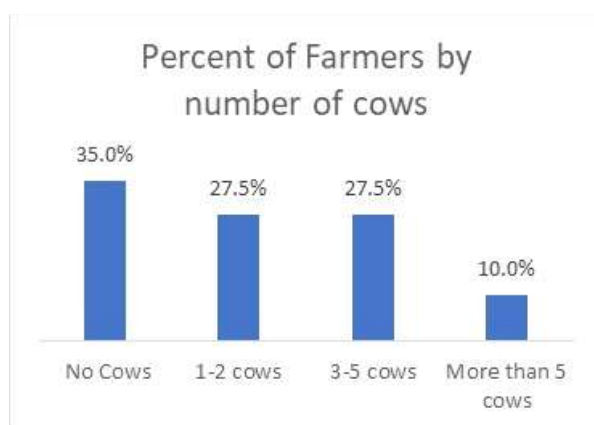
### Livestock Holdings And Adoption Of AI

#### Livestock Holdings

The majority of farmers rear a small number of cows and buffaloes, with a notable proportion having no cows at all. This suggests that the AI program is reaching both livestock-intensive and less-intensive farmers, broadening its impact.

The presence of small-scale livestock holdings among most farmers suggests that AI adoption is driven by those with fewer animals, who seek to enhance productivity with limited resources. The program's reach among farmers with no cows indicates potential areas for further engagement and support.

Farmers with fewer livestock are often more inclined to adopt AI as a means to maximize their limited resources. One farmer shared, "**I only have two cows, but AI has helped me increase their productivity. It has made a big difference in my small livestock set up .**"



### Income and Milk Production

While detailed quantitative data on income and milk production is limited, qualitative responses indicate that farmers perceive a marked improvement in their economic situation after adopting AI. This improvement is linked to increased milk yields, better livestock health, and reduced veterinary costs.

Indicator s	Observation Type	Insight s from Qualitative discussions
Increase in Milk Yield	Qualitative	Farmers reported a noticeable increase in milk production, with several mentioning up to a 20% increase.
Reduction in Livestock Mortality	Qualitative	Respondents noted fewer livestock deaths, attributing this to the healthier calves produced through AI.
Increased Income from Livestock	Qualitative	Many farmers mentioned that higher milk yields and healthier calves have led to better market prices and improved income.

### Awareness and Adoption Rates

The program successfully raised awareness of AI from 30% before the program to 85% afterward. Similarly, the adoption rate of AI technology among the farmers rose from 0% to 75%.

Indicator	Pre -Program	Post -Program	Change
Awareness of AI	30%	85%	+55%
Adoption of AI	0%	75%	+75%

The substantial increase in awareness and adoption rates highlights the program's success in educating farmers about the benefits of AI and encouraging its use. The substantial rise in adoption indicates that the program's training and outreach efforts were highly effective.

Many farmers shared that they were initially unaware or sceptical of AI. After attending training sessions and seeing the benefits firsthand, they were convinced to adopt the technology. One farmer stated, **“Before the program, I didn't know much about AI, but the training showed me how it could improve my farm. Now, I wouldn't go back to the old ways.”**

Increased Awareness	Scale-Up Initiatives	Scale-Up Initiatives	Scale-Up Initiatives
<ul style="list-style-type: none"> <li>Before Program: 30% aware of AI</li> <li>After Program: 85% aware of AI</li> </ul>	<ul style="list-style-type: none"> <li>Adoption: 75% of farmers adopted AI after the program</li> </ul>	<ul style="list-style-type: none"> <li>Increased Milk Yield: Up to 20% increase in production</li> <li>Improved Livestock Health: Reduction in livestock mortality (yet to get an estimate but reported by farmers during Qualitative)</li> </ul>	<ul style="list-style-type: none"> <li>Veterinary Support: 50% of farmers need regular veterinary services</li> <li>Fodder Provision: 45% of farmers need affordable fodder</li> <li>Training Needs: 55% of farmers require continued training</li> </ul>

### Recommendations

- Enhanced Veterinary Support
- Regular mobile veterinary clinics and medical camps can be established to provide timely healthcare for livestock.
- These services will help in the early detection and treatment of diseases, ensuring healthier animals and better productivity
- Partnerships with local suppliers and government programs can be developed to leverage fodder and nutritional supplements at subsidized rates and government schemes.
- This will ensure that farmers can afford the quality nutrition necessary for their livestock to thrive
- Continuous training programs, in collaboration with agricultural experts and institutions, should be offered to farmers.

## Solar Street Light Project

### Introduction



The solar streetlight program in Ankleshwar, a district in the state of Gujarat, was undertaken by Gharda Foundation to enhance safety, social interaction, and accessibility in the project villages. Additionally, it aimed to tackle local unemployment by providing solar maintenance training to 20 youth, empowering them with technical skills and creating sustainable livelihood opportunities.



### Program Objectives:

- To enhance night-time safety, social interactions, and accessibility in the village.
- To provide solar streetlight maintenance training to local youth to address unemployment.

Problem Statement	Interventions	Outcome	Impact
<ul style="list-style-type: none"> <li>Lack of lighting on main roads led to safety issues for women, children and elderly at night</li> <li>Increased theft incidence</li> <li>Low social interactions after dark</li> <li>Occasional snake attacks due to poor visibility</li> <li>Challenges for people arriving at the bus stand at night, for making navigation safe the people had to use mobile lights</li> </ul>	<ul style="list-style-type: none"> <li>Installation of solar-powered street lights on main roads in the villages</li> <li>Solar maintenance Skills training to 20 youth</li> </ul>	<ul style="list-style-type: none"> <li>Improved night time visibility on main roads</li> <li>People, especially women and children, felt safer walking in the village at night</li> <li>Reduced incidence of theft</li> <li>Enhanced family income through jobs obtained in Solar maintenance and self-entrepreneurship</li> </ul>	<ul style="list-style-type: none"> <li>Increased sense of security among the village population</li> <li>Rise in social interaction in the community</li> <li>Better accessibility for people using the bus stand, improving overall convenience and safety</li> <li>Increase in income</li> </ul>
<ul style="list-style-type: none"> <li>Lack of local technical expertise in maintaining Solar Street lights</li> </ul>	<ul style="list-style-type: none"> <li>Youth from the community were trained on maintaining solar street lights</li> </ul>	<ul style="list-style-type: none"> <li>Out of 20 trained in maintenance of solar lights 13 secured jobs in company, electricity shop or self employed</li> </ul>	<ul style="list-style-type: none"> <li>Out of 20 individuals trained in solar light maintenance, almost 50% of the trained individuals have secured jobs in companies, electricity shops or have become self-employed</li> </ul>

Strengths	Challenges	Recommendations
<ul style="list-style-type: none"> <li>Enhanced safety and visibility at night time</li> <li>Increased confidence in women and children to move around in night</li> <li>Sustainable, eco-friendly energy solution</li> <li>Cost-effective lighting source with low maintenance needs.</li> </ul> 	<ul style="list-style-type: none"> <li>Initial investment costs for solar lights were high</li> <li>Maintenance of solar panels and lights in remote areas can be difficult</li> <li>Weather related challenges affecting solar power efficiency</li> </ul> 	<ul style="list-style-type: none"> <li>Provide training for local technicians to handle basic repairs</li> <li>Install additional solar lights in areas with higher safety risks</li> </ul>



# 04

Location: Pune

## CSR Projects Elderly Care



Implementing Partner: International Longevity Centre

## Introduction

The International Longevity Centre-India (ILC-I) implemented several initiatives to address the growing needs of senior citizens. These initiatives were supported by Gharda Chemicals Ltd. and focused on enhancing both the digital literacy and physical health of seniors through two programs



Ensure healthy  
lives and promote  
well-being for  
all at all ages

**1 Mobile Literacy Training** and **2. Physiotherapy Camps.** These programs aimed to reduce the digital divide, alleviate isolation, and improve overall well-being by empowering senior citizens with essential digital and physical skills.



Component	Problem Statement	Intervention	Outcome	Impact
<b>Physiotherapy</b>	Senior citizens suffered from mobility issues, chronic pain and dependence on others for daily activities	Physiotherapy sessions, physical assessment, pain management advice and exercise demonstration	85% of beneficiaries reported improvement in mobility, 75% stated pain reduction, 90% needed less assistance in daily activities	Seniors reported reduced pain, better mobility and greater independence in daily life activities thereby enhancing quality of life and wellbeing
<b>Mobile Literacy</b>	Senior citizens faced social isolation due to lack of digital illiteracy and dependency on others for online communication and financial transactions  Awareness on digital frauds was shared	Digital literacy training, focusing on messaging app, video calls, online payment and cyber security	90% reported to have improved their interactions with friends and families through social media  85% accessed information such as news and daily affairs easily through the internet  80% started to use digital apps for financial online transactions  90% respondents reported decrease in their social isolation due to use of digital means of communication	95% of participants felt more confident, independent and socially connected

## About Program Activities

**Mobile Literacy Training:** This program was launched to help senior citizens adapt to modern technology, making smartphones an accessible tool for communication, online transactions, and managing daily tasks. The training covered a wide range of skills, such as using messaging apps, making video calls, and conducting online banking.

**Physiotherapy Camps:** Designed to improve mobility and alleviate pain among older adults, these camps provided a comprehensive physical assessment by physiotherapists. Participants received personalized exercise regimens and follow-up support to ensure consistent progress.

## Research Objectives

- To assess the impact of the Mobile Literacy Program on the digital empowerment of senior citizens.
- To evaluate the effectiveness of Physiotherapy Camps in improving the physical mobility and reducing pain for older adults.
- To understand the overall improvement in the quality of life among senior citizens as a result of these interventions.

## Physiotherapy Camp Program Outcomes

### Health Awareness and Improvements

The camp provided comprehensive health assessments, exercise demonstrations, and personalized consultations with physiotherapists. Participants experienced an increased awareness of their physical health and the importance of maintaining a regular exercise routine. Many reported understanding pain management techniques better and adopting long-term health habits.



## Impact of Physiotherapy Program

### Before and After Comparison of Health and Daily Life

The Physiotherapy Program delivered substantial improvements in mobility, pain management, and overall physical health. Participants who initially reported limited mobility experienced an 85% improvement, while 75% noted a reduction in pain and discomfort.

The need for pain medication decreased by 70%, and 90% of the participants required minimal or no assistance with daily activities such as bathing and dressing after the program.

Furthermore, 70% of participants shared their knowledge with peers, contributing to broader community health awareness.

The program also succeeded in fostering long-term exercise habits, with 80% of participants continuing regular exercise routines after the program.

## Improvement - Pre and Post Program

Challenges/ Issues	Pre-Program	Post-Program	Improvement (%)
Mobility	Limited mobility	Improved mobility	85%
Pain or Discomfort	Frequent pain/discomfort	Reduced pain/discomfort	75%
Use of Pain Medication	Frequent use of pain medication	Occasional or no use of pain medication	70%
Assistance with Daily Activities (Bathing, Dressing)	Frequent need for assistance	Minimal or no assistance required	90%
Social Engagement (Knowledge Sharing)	Limited engagement with peers	Extensive sharing of knowledge with peers	70%
Daily Exercise Routine	Sporadic or no exercise	Regular and consistent exercise	80%

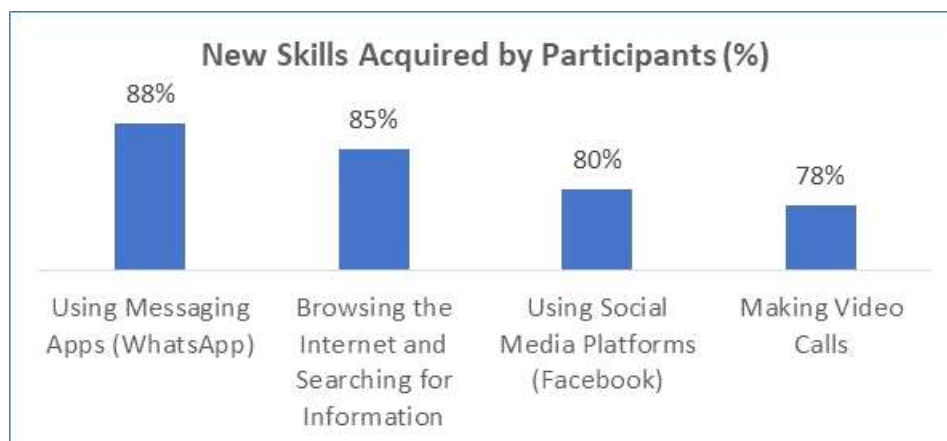
## Physiotherapy Camp Program

Key Findings	Recommendations
85% of participants reported improved mobility, and 75% experienced reduced pain.	Ensure continued access to physiotherapy for seniors, especially those with early signs of mobility issues.
70% of participants reduced their reliance on pain medication.	Develop a long-term support system to monitor progress and provide ongoing physical assessments for participants.
90% of participants required minimal assistance with daily activities post-program.	Encourage home-based exercise routines with periodic virtual or in-person check-ins to maintain physical health.
80% of participants continued their exercise routines after the camp.	Promote community-led initiatives to encourage more knowledge sharing among participants and peers.

## Outcomes of Mobile Literacy Programs

### Skill Acquisition:

There was a substantial increase in the ability of participants to use digital tools, particularly for making video calls and using messaging apps. This outcome aligns with the program's objective of enhancing digital literacy. Nearly 90% of participants reported feeling more comfortable with tasks like video calling, indicating a positive response to the training.



The training significantly boosted the abilities of participants to use digital tools. Participants gained new skills like making video calls, conducting online transactions, and handling digital tasks such as saving contacts and recognizing fraud calls. These new skills not only empowered the seniors but also reduced their dependence on family members for technical assistance.

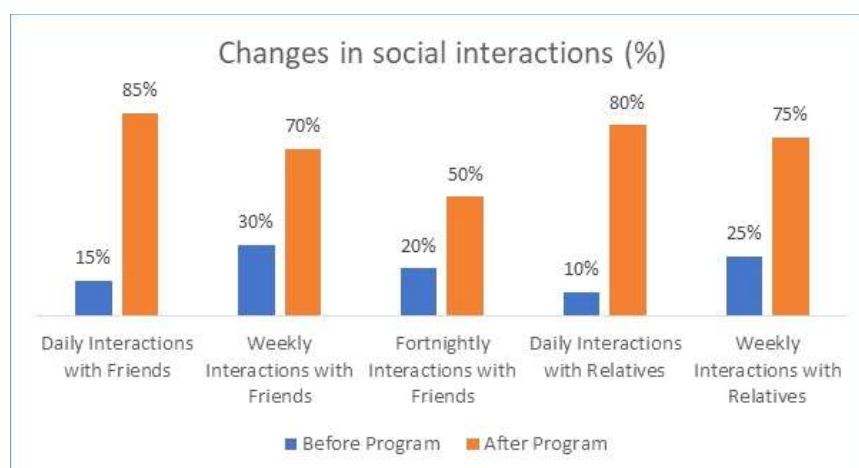
## Mobile Literacy Program Impact

### Impact on Daily Life

The Mobile Literacy Program greatly boosted the digital skills and the independence of the participants. 90% improved communication with family and friends, 85% found it easier to access online information, 80% managed finances and bills online, and 75% enhanced their online shopping. Overall, 95% felt more confident and self-reliant in daily life, highlighting the program's success.

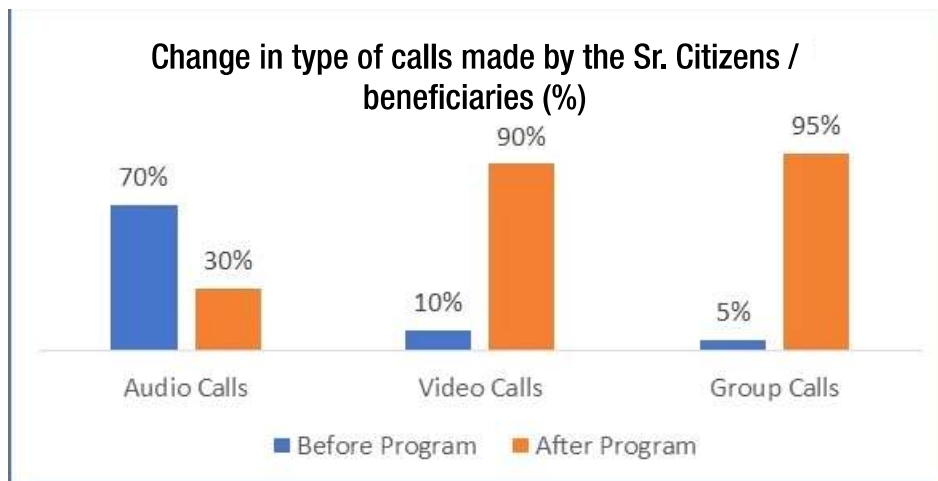
### Change in Social Interaction After Program

The program significantly improved participants' social interactions, with daily engagement with friends rising from 15% to 85% and with relatives from 10% to 80%. Enhanced communication tools helped reduce isolation, enabling seniors to join family group chats, connect with distant relatives, and share their live locations, strengthening social bonds etc.



### Type of Calls Made Before and After Program

Participants became significantly more comfortable using complex digital tools. Before the program, 70% of participants relied primarily on audio calls, with only 10% using video calls. After the program, 90% were using video calls, and 95% were making group calls. This shift demonstrates the participants' improved proficiency with modern communication technologies.



## Mobile Literacy Program

### Skill Acquisition:

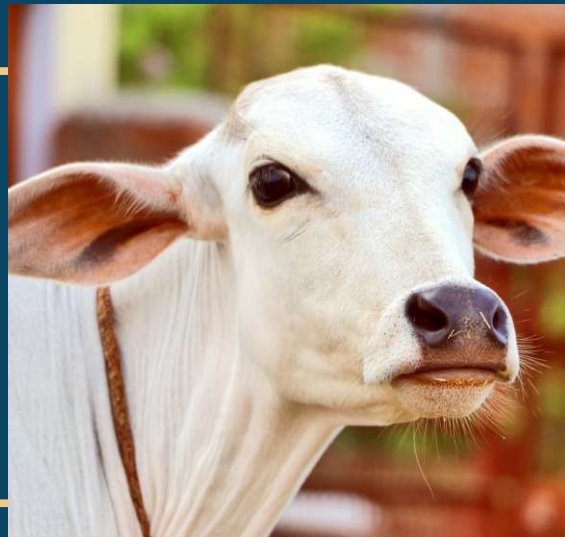
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Key Findings	Recommendations
90% of participants reported improved digital skills, particularly in using messaging apps and video calls.	Expand the program to cover more advanced digital skills such as online healthcare services and digital security.
85% of participants joined the program to stay connected with family and friends.	Continue to emphasize the social benefits of digital literacy to engage more seniors in the program.
Social isolation decreased significantly, with 90% of participants increasing daily communication with friends and family.	Introduce follow-up sessions or refresher courses to reinforce skills and encourage sustained digital engagement.



# CSR Projects

## Promotion of Sorted Semen



Implementing Partner - BAIF

## Introduction

The project focuses on promoting the use of sorted semen technology in artificial insemination (AI) to increase the population of female calves, which contributes to higher milk production and enhanced income for farmers. Gharda Chemical, under its CSR initiative, offers subsidized sorted semen dose to make the technology affordable for farmers.

### Objectives of the program

- To popularise sorted semen technology to produce a greater number of female calves
- To increase overall milk production and income of farmers towards contributing to doubling a farmer's income.

### Project Locations

The program has established a total of 113 centres across 13 locations, serving 8,500 families in Amravati, Beed, Bhandara, Hingoli, Jalgaon, Latur, Nagpur, Nashik, Osmanabad, Pune Satara and Solapur districts in Maharashtra.

### Problem Statement

Farmers primarily depend on agriculture, but livestock management and dairy farming offer valuable supplementary income. However, the high cost of sorted semen, limited awareness of government schemes, and reliance on conventional AI methods, which yield a 50-50 male-to-female calf ratio, hinder the potential for increased milk production. Financial constraints further limit the farmer's ability to invest in advanced livestock management technologies



#### About BAIF

BAIF Institute for Sustainable Livelihoods and Development (BISLD), is a not-for-profit organization registered under Section 25 of the Companies Act, 1956 (presently Section 8 of the Companies Act, 2013) and formally established on April 16th, 2012. BISLD is closely associated with BAIF Development Research Foundation, a reputed Non-Government Organization founded in 1967 by Dr Manibhai Desai, a disciple of Mahatma Gandhi.



#### Sorted Semen Technology

Sexed semen is sorted semen either to contain X or Y chromosome bearing sperms and the use of it would produce a desired sex i.e. male or female animal. In dairy sector, preference is always given to a female calf and thus the use of X chromosome bearing sperms semen will be useful to produce maximum number of females.



## Intervention Undertaken during FY 2023-24

- BAIF has promoted sorted semen which produce 90% female calves in place of conventional semen with possibility of 50:50 calf sex ratios. These AI services are provided at the doorstep of farmers at a 60 % subsidised rate (Rs 450/- per Sorted Semen dose).
- Organized awareness programs on the benefits of sorted semen
- Strategies explained for maintaining cows and calves disease and infection free
- Educate farmers on fodder/silage creating
- Regular visits by veterinary AI technicians to farmers to address and resolve health issues
- Ensure proper cow health management through vaccination, deworming, and a balanced diet.

## Profile of the respondents

The farmers' profile is derived from survey responses collected from 100 participants across five locations, including Dharashiv, Pune, Solapur, Jalgaon and Satara districts in Maharashtra.

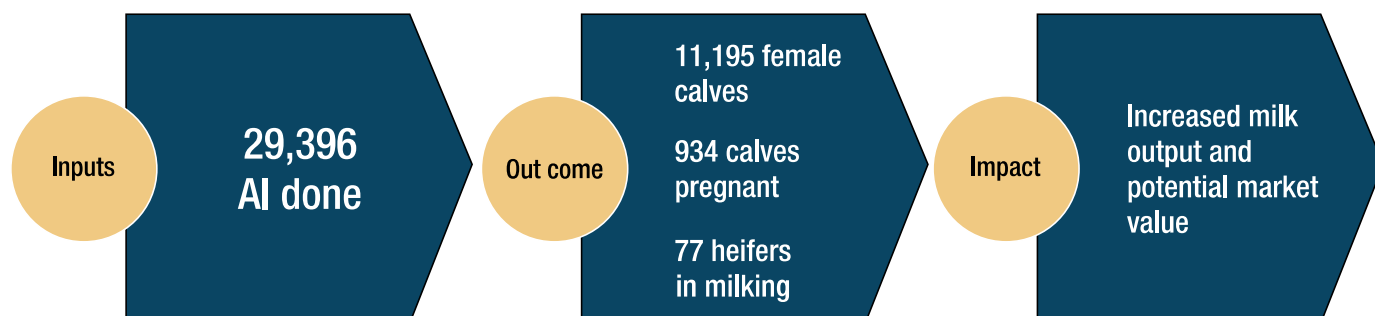


- The survey of 100 farmers in Maharashtra shows that on average farmers are 37 years old
- 3 acres average landholding among the farmers surveyed.
- In the surveyed area, farmers cultivate several crops such as sugarcane, soyabean, maize, onion, corn and cotton, with 40% indicating that sugarcane is their main crop.
- Cattle rearing serves as primary source of income for 58% of respondents, while 41% depend on agricultural activities and 1 % of the respondents engage in small businesses such as a small shop or hotel. In focus group discussions, participants highlighted that cattle rearing offers immediate cash flow and has been a family tradition, making it a more appealing choice compared to agriculture, which is often reliant on rainfall.

## Project Impact on Social, Economic and Animal welfare

Interaction with farmers through individual interviews and focus group discussion revealed the following Impact.

Note:



## Economic impact

- **Asset creation** - The rise in the number of female calves born has resulted in an increase in the value of livestock assets. The current market value of a 4 months calf rate ranges from ₹ 25,000 to ₹ 35,000 and a calf of 5-9 months rate ranges from ₹70,000 to ₹75,000/-. The table below denotes asset value created across 13 programmatic locations.

Sr. No	District	Number of AI done in selected Centres	Number of calves produced	Upto 1 -year Rs75000/ - per calf if sold	Number of Female calves pregnant	Pregnant calve value - Rs1,50,000 per calf if sold	Number of Heifers in milking	Value of Heifers Rs1,00,000 if sold
1	Ahmednagar	8141	2130	159750000	0	0	0	0
2	Amravati	2902	1272	95400000	95	14250000	5	5,00,000
3	Beed	1829	785	58875000	113	16950000	19	19,00,000
4	Bhandara	145	62	4650000	7	1050000	0	0
5	Hingoli	859	465	34875000	32	4800000	2	200000
6	Jalgaon	675	316	23700000	38	5700000	0	0
7	Latur	95	26	1950000	0	0	0	0
8	Nagpur	232	104	7800000	11	1650000	0	0
9	Nashik	3187	1411	105825000	105	15750000	13	1300000
10	Osmanabad	2558	999	74925000	128	19200000	4	400000
11	Pune	4812	2099	157425000	312	46800000	27	2700000
12	Satara	3283	1299	97425000	93	13950000	7	700000
13	Solapur	678	227	17025000	0	0	0	0
<b>Total</b>		<b>29396</b>	<b>11195</b>	<b>839625000</b>	<b>934</b>	<b>140100000</b>	<b>77</b>	<b>7700000</b>

The above table denotes that due to BAIF intervention, total assets created by 8500 farmers is Rs 98,74,25,000. ( Rs. 98.74 Crores) On an average each farmer created Rs 1,16,168/-assets value.

The table demonstrates that artificial insemination (AI) has significantly contributed to asset creation for farmers, evident in the value of the calves produced. The financial potential from selling calves at various stages offers farmers a reliable source of liquidity in times of need. Moreover, pregnant calves and milking heifers promise future income from milk production, enhancing the financial security for farmers. Cows remain valuable assets that will increase livestock numbers, promoting sustainable income growth and enhancing the overall economic well-being of farmers.

## Economic impact

Increase in milk output – It has been learnt that milk production has increased due to cross / improved breeding. Currently, most farmers sell to the co-operative dairy farm where the rates are approximately around Rs30/- per Litre Rs18000/- to 20,000,000 earned per month (depending on herd size). Farmers were of the opinion that when calves begin producing milk, they will yield an average of 25 litres per day with improved milk quality, with a selling price of around Rs. 40 per litre, resulting in a monthly income of approximately Rs. 30,000 per month. Following calving, the milk production from cows increases by an additional 1 to 1.5 litres, further enhancing the potential income for farmers. This increase in milk yield not only boosts the overall production but also contributes to greater profitability, highlighting the economic advantages of effective cattle management and breeding practices.

## Livestock Health Management

- Reduced treatment costs for cow health treatment by over 50% a year. Farmers now spend Rs 5,000/- to Rs.10,000/- on treatment, reduced from the earlier amount of Rs. 25,000 to Rs 30,000/-
- Reduced incidence of infections, Improved management and treatment of udder infections
- Some of the farmers have taken the initiative to generate fodder

## Impact of Training on Enhancing Respondents' knowledge on cattle management

Through group discussions and open-ended questions in the qualitative study it was evident that the training sessions improved the respondent's knowledge of cattle management. The data suggests that respondents believe the providing adequate nutrients like fodder, is essential for ensuring healthy calves. This shows that respondents have developed an understanding of the relationship between proper nutrition and health of the calves. Respondents emphasized the need for effective temperature control within cow sheds and acknowledged the benefits of allowing cows access to open grazing areas which can enhance health and productivity. Additionally, they learned essential management practices such as timing of insemination, calving duration, and the overall growth of cows.

Many highlighted that calves born from sorted semen are healthier and more productive, ultimately leading to higher profits. Additionally, they expressed an understanding of the differences between sorted and conventional semen and recognized the positive impact of these practices on their livestock management.

## Impact of Veterinary Services

Regular visits from veterinary artificial insemination (AI) technicians have been instrumental in tackling and resolving health issues in livestock. These specialists provide timely interventions, have helped to reduce the incidences of health problems, especially udder infections, which can adversely impact milk production and the overall well-being of the animals.

Veterinary technicians' regular availability has encouraged farmers to take a more active role in monitoring the health of their livestock. They have become more aware of the early warning signs of potential issues and seek timely veterinary assistance, which helps prevent minor problems from escalating into more serious health concerns.

Before BAIF's support, beneficiaries relied on private veterinarians, spending Rs. 5,000/- for just two cows. Now, the savings can be applied to repay loans and invest in other projects. They believe that additional support for new initiatives will encourage more youth to take up farming and motivate youth to consider agriculture as a promising career option.

## Impact of Artificial Insemination (AI) on Farmers' Interest in Sorted Semen

Nearly 90% of the farmers surveyed had inseminated their cows. The survey revealed that 458 cows, with an average age of 5 years, were inseminated, resulting in the birth of 313 calves, reflecting a high success rate. For buffaloes, 31 were inseminated, producing 12 calves. This highlights the effectiveness of artificial insemination in livestock reproduction, supporting farmers in growing their herds.

The table below presents the affirmative (yes) responses regarding the influence of AI on farmers:

<b>Influence of AI on Farmers</b>	<b>Number of Farmers</b>	<b>Percentage</b>
Farmers influenced by AI	76	76%
Farmers inquiring about sorted semen	63	63%
Farmers approaching for sourcing semen	47	47%
Farmers using sorted semen	40	40%

Base -100

The data indicates a significant positive correlation between exposure to AI and the adoption of sorted semen. As farmers observed the advantages of AI, interest and inquiries increase, ultimately resulting in sourcing and using sorted semen. This transition from inquiry to implementation demonstrates the increasing acceptance and confidence in AI's effectiveness for enhancing livestock breeding, a trend expected to persist as more farmers witness successful outcomes from early adopters.

## Education on Fodder/Silage Creation

It has been seen that education and awareness imparted by BAIF on fodder and silage motivated farmers to cultivate the same. Before intervention, farmers were purchasing most of their fodder and silage from external sources. After intervention, farmers began cultivating fodder on their limited land, helping them to partially meet their fodder needs from their own cultivation, leading to cost saving. During the group discussion, participants mentioned that one cow requires approx. 700 kg of silage per month. After introducing silage into the cows' diet, milk production increased from ~14-15 litres to 18-20 litres per day. While the milk price remained unchanged, the increased production resulted in higher income.

Previously, participants would go to the farm daily to cut fodder, paying labor costs of Rs. 200 per day and spending Rs. 50 on petrol to transport the fodder by bike or vehicle. After interacting with BAIF AITS, they organized themselves to store silage and use mineral mix. As a result, the time spent on feeding cows, which used to take the entire day, has significantly reduced. Now, they have more time to focus on agricultural work, allowing them to care for crops and carry out tasks like timely weeding (favarni) and attend to crop protection more efficiently. Additionally, most participants noted that they saved between Rs. 4,000 to Rs. 5,000 per month due to the silage creation.

## Perception of respondents towards AI

All respondents expressed that artificial insemination (AI) would benefit them. To gain further insight into their perception of AI, they were asked how it would be advantageous. The following table summarizes their responses.

Perception category	Yes (%)	No (%)	Don't know (%)	Total
Expected female calf	90	2	8	100
Preventing spread of reproductive diseases	67	5	28	100
Economic benefit	77	3	20	100
Cost saving	76	1	23	100
Reduced Labor	58	5	36	100

Overall, the above table indicates that respondents have a highly favourable perception towards artificial insemination as a breeding method. They believe that AI enhances the health of their cattle, increases the likelihood of producing female calves, and prevents the spread of reproductive diseases. Furthermore, respondents recognize the economic advantages and cost saving associated with AI, making it an appealing choice for improving livestock management and productivity.



## Recommendations

To improve livestock management and enhance cattle welfare, several recommendations have been made by respondents.

- Firstly, creating free movement sheds for cows can enhance their well-being as well as lowering labour costs. Emphasizing good feeding and breeding practices is vital for increasing the number of female calves and enhancing overall livestock health.
- Farmers should be encouraged to adopt open cattle management instead of closed systems, which facilitates better ventilation and minimizes disease transmission.
- It is essential to inform farmers about various government schemes that can help them secure loans and establish market linkages for producing value-added products like ghee and paneer.
- Additional training should be provided for farmers on cow management practices, including open shed management, nutrition, and disease prevention.
- Organizing exposure visits to farms that have successfully implemented artificial insemination (AI) to improve livestock and achieve financial stability.

## Other Recommendations:

Emphasizing value addition through the production of products like paneer and ghee, and developing market linkages can attract reduce forced migration. These initiatives should go hand in hand with promoting sorted semen, as they will complement each other and enhance the overall promotion of sorted semen.

The availability of fodder and mineral supplements at subsidized rates from donors will significantly enhance the program's impact by reducing the financial burden on farmers. This support will also encourage more farmers to participate in the program, ensuring long-term sustainability and increased economic benefits for the community. Additionally, it can foster improved livestock management practices across the region.

## Inspiring Example of Mukta Gotha for Improved Livestock Management

Some farmers have successfully created Mukta Gotha (Open Shed) by taking loans on their own, with costs ranging from Rs. 10 to Rs. 15 lakh. The open shed system has saved them significant time and effort, as they now only need to visit twice a daily for feeding, watering, and cleaning instead of being present for the entire day. Farmers have also adopted the practice of feeding their cows at 12-hour intervals. Female calves born in this system are lighter, and cows experience smoother deliveries. Silage feeding has been introduced, particularly for pregnant cows, which helps maintain stable milk production, though it may decrease by one litre during pregnancy. This system has also led to savings in petrol and labour costs, as well as consistent feed consumption, with each cow consuming 1 ton of feed at Rs. 700 per kg.

This successful Mukta Gotha implementation serves as a model for other farmers, highlighting reduced labour, improved cattle health, and consistent milk production through better livestock care. It encourages adoption of similar practices, leading to cost savings and greater financial stability.

- Increased number of calves
- Reduced financial burden for farmers
- Successful pregnancies indicate effective use
- Milking heifer's technology is leading to productive outcomes

### Strengths

The sorted semen program has created significant interest among farmers due to the potential for increased milk production

### Challenges

The high cost of sorted semen AI, even with subsidies, remains a barrier for some farmers

Weather conditions and fodder availability impact cow health

Expanding the program across more villages is challenging due to the need for more funds and resources for awareness and AI services

### Recommendations

Provide affordable mineral supplements and balanced diet programs to farmers to ensure health and productivity of cows

Offer financial incentives or training program for young farmers to keep them engaged in dairy farming

Continue organizing regular awareness programs, training and refreshers to ensure farmers stay informed about the latest advancement in AI and cow health management

# 04

## CSR Projects Agriculture Based livelihood



Implementing Partner: Gharda Foundation

### Introduction

GCL has supported Gharda Foundation to initiate and develop sustainable agro based livelihood projects. Through Gharda Foundation approximately 400 farmers are covered under these initiatives. Introducing the best agricultural practices, technology along with skills and knowledge were the objectives of this project. Gharda Foundation collaborated with Konkan Krishi Vidyapeeth Dapoli, as a knowledge partner for this project.



#### Problem Statement

In spite of having heavy rainfall in Konkan, farmers in Khed faced challenges such as low crop yields, poor livestock health, and inefficient agricultural practices, while SHG women had limited access to economic activities.

#### Interventions

- **Training and Support:** Gharda Foundation (GF) conducted awareness and training on best agricultural practices and also conducted live demonstrations on beneficiaries' farms.
- **Seed supply:** 14 different types of vegetable and oil seeds supplied to identified farmers
- **Vermicomposting Initiative:** GF supported women farmers to develop vermi-composting project. Material, technical knowhow, packaging of compost and marketing support were provided by GF.
- **Follow-up Support:** Ongoing support provided to improve knowledge about vermicomposting and product creation.
- **Azolla Cultivation (protein-based algae):** GF provided live demonstration for azolla cultivation and supported efforts to promote the same among the farmers

In order to capture immediate results and outcomes of the project, 40 IDIs and FGDs were conducted with 40 participants (farmers and SHG women) who were the part of the intervention program.

## Vermi Composting

Vermicomposting is a process that uses earthworms to convert organic waste into nutrient-rich compost, enhancing soil fertility. This program was undertaken for SHG women by Gharda Foundation to empower them with sustainable agricultural practices, improving their skills in vermicomposting and enabling them to generate additional income.

Vermicomposting is a sustainable process that uses earthworms to convert organic waste into nutrient-rich compost, enhancing soil health and promoting plant growth. This eco-friendly method not only recycles waste but also reduces landfill contributions and supports sustainable agricultural practices.



## Outcomes and Impact

- **Initial Barriers to Participation:** GF initially identified that only a small number of SHG women were involved in product creation due to a lack of financial resources, technical knowledge, and market access.
- **Introduction of Vermi-Composting:** To address these barriers, GF introduced a vermi-composting initiative that required low investment and offered high returns with minimal time commitment. This was an ideal solution for women balancing multiple responsibilities.
- **Training and Material Support:** GF provided technical training and initial materials to SHG women, enabling them to begin vermicompost production. As a result, they produced 850 kg of compost, generating a profit of Rs. 10,000.
- **Earthworm Production and Sales:** In addition to compost, the women produced upto 5 to 6 Kgs of earthworms from a single bed, which they sold for Rs. 400 per kg, creating another income stream. The profits were reinvested to expand their operations by creating additional vermicomposting in vermicompost beds.
- **Increased Participation and Interest:** The visible success of the project led to a significant increase in participation among SHG women. Those who were initially uninvolved have now shown interest and started making inquiries about joining the initiative.
- **Economic Impact:** The intervention positively impacted the monthly income of participating SHG women, showcasing vermicomposting as a profitable and sustainable agro based livelihood. This success has inspired other women farmers to explore alternative agricultural income

## Azolla Cultivation

Azolla is an aquatic floating fern recognized for its nutritional benefits as a sustainable feed source for livestock, particularly amid rising animal feed costs. Many farmers experience challenges with the seasonal availability of green grass, especially during the summer, which negatively impacts milk production and quality, leading to lower prices and financial losses.



## Outcome

1. **Cost Reduction:** Monthly feed costs decreased from Rs. 3,000 to Rs. 1,500 after transitioning to Azolla production.
2. **Health Improvement:** Illness-related expenses for cows reduced from Rs. 500 to Rs. 100 per month due to better nutrition.
3. **Increased Milk Production:** Milk yield per cow increased from 10 litres to 13 litres per day.
4. **Enhanced Milk Quality:** Fat content in the milk rose by 2–3 points, improving overall quality.

## Impact

1. **Economic Benefits:** The reduction in feed and healthcare costs significantly improved the profitability of dairy farming for the farmers.
2. **Sustainability:** The adoption of Azolla as a feed supplement promoted sustainable farming practices, reducing reliance on traditional feeds.
3. **Enhanced Livestock Health:** Improved nutrition contributed to better overall health of the cows, leading to increased productivity and reduced veterinary expenses.
4. **Community Empowerment:** By learning to produce Azolla, farmers gained valuable skills, enhancing their confidence and fostering a sense of self-sufficiency within the community.

## Seed Distribution Activity

### Outcomes and Impact

- Increased farming area - It has been seen that to the distribution of seeds by GF to Farmers motivated them to cultivate additional farms plots. Earlier, they were cultivating one crop in 1 acre of land, but it was possible to produce additional vegetables in unutilized land. GF had provided seeds to 36 farmers at the initial stage of the program. Through participatory approach, farmers were allowed to select seeds as per their choice.
- Increased Productivity - As per the farmers' perceptions, they could increase the productivity of their land by cultivating additional crops. Respondents mentioned they were producing on an average 10 kgs of vegetables earlier, now they produced 20 kg leading to greater agricultural productivity and optimized land use, contributing to overall higher yields
- Increased income - The program boosted profits, with one farmer earning Rs. 30,000/- from the sale of groundnut oil in a season (4-month duration crop), highlighting the financial benefits of improved agricultural practices.

## Impact of Gharda Foundation's Agricultural Initiatives

Maharashtra is a leading state in India for agricultural production, contributing approximately 13.9% to the country's total agricultural output. As of 2020, around 60% of the state's population depends on agriculture for their livelihoods, highlighting the significant economic reliance on this sector.

Upon assessing the impact of the Gharda Foundation's initiatives regarding income, agricultural practices, and knowledge enhancement in agro-livelihood activities, it was noted that farmers perceive the overall impact as satisfactory. This positive perception indicates that the Gharda Foundation is in the early stages of project implementation, focusing on outreach to selected farmers to demonstrate the best practices that can be replicated and scaled up.

The engagement of farmers in adopting best practices has been notably high, particularly in techniques such as vermicomposting, Azolla cultivation for livestock nutrition, multi-cropping or additional vegetable cultivation. This engagement can be attributed to continuous training, awareness sessions, and live demonstrations on effective agricultural practices. There is a clear correlation between the efforts made by the Gharda Foundation and the increased participation of farmers in these sustainable practices.

According to the Maharashtra Agricultural University, the use of vermicompost can increase crop yields by 20-30% compared to traditional compost methods, aligning with the outcomes observed among program participants. Income indicators further illustrate the substantial economic impact of the inputs provided by the Foundation. On average, women farmers engaged in vermicomposting have reported a monthly income increase of Rs. 10,000. Additionally, Azolla cultivation has opened new avenues for increased milk production, projected to further enhance incomes in the near future. Studies indicate that incorporating Azolla into livestock diets can boost milk production by 2-3 liters per cow per day, corroborating the positive effects of Azolla cultivation on farmers' livelihoods.

The seed distribution program has motivated farmers to diversify their crops, yielding an average income of Rs. 20,000 per cycle from vegetable cultivation. The Government of Maharashtra has implemented various schemes to empower women in agriculture, including financial assistance and training programs. The Gharda Foundation's initiatives are well-aligned with these state government efforts.

This growing trend of increased income and the adoption of best practices not only benefits individual farmers but also encourages others in the community to follow suit, contributing to the overall economic development of the region.



### Strengths

- Targeted training
- Community empowerment
- Scalability (reinvestment of profits expansion)
- Follow-up support by Gharda Foundation

### Challenges

- Limited marketing and packaging knowledge
- Lack of structured financial training
- Inconsistent sales
- Lack of business practices like commercialization, product scaling

### Recommendations

- Provide training in marketing, packaging, financial management for long-term sustainability
- Develop marketing plan that includes branding customer outreach and partnerships to create demand
- Access to micro-finance loans
- Explore broader markets

# 04

Implementing Partner: Gharda Foundation

## CSR Projects

Digital Enhancement in  
Gharda Institute of Technology



### Upgradation of Computer Lab in GIT

## Introduction

Gharda foundation installed 175 new desktops in Gharda Institute of Technology, Khed. The project aimed to improve computer access and infrastructure for students by upgrading old computers, providing more desktops for additional subjects.



Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all



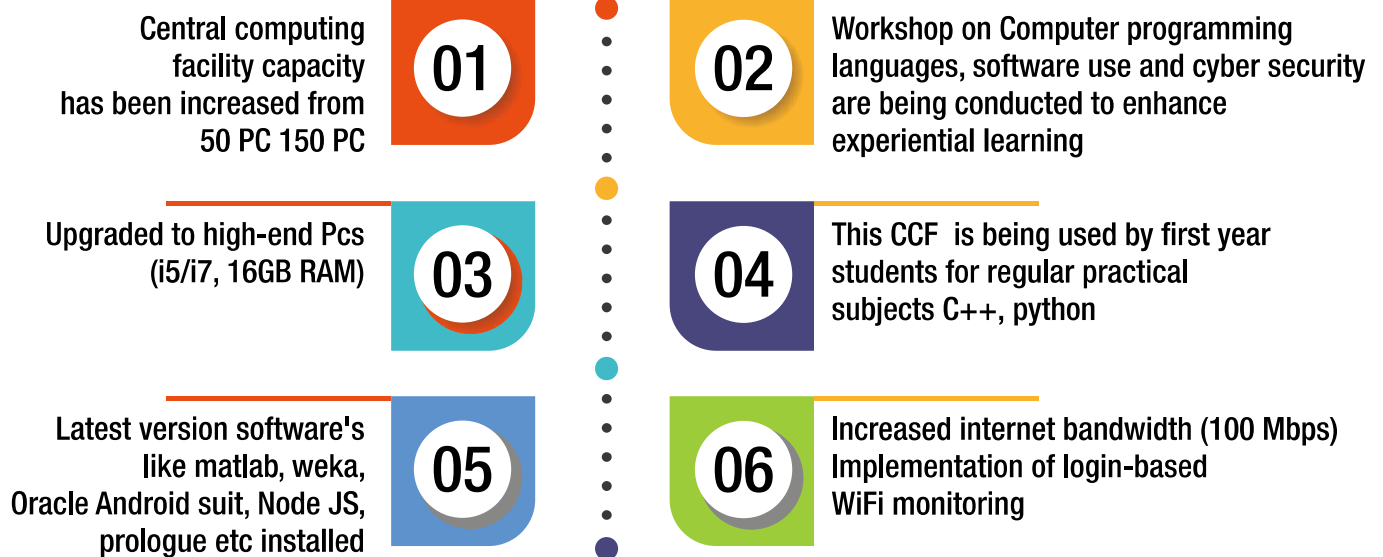
As per the All India Council for Technical Education (AICTE), every Department shall have separate Computer Laboratory with at least 20 Computers and a centralized Computer Laboratory with at least 100 Computers.

**Objective of Project-** Upgradation of Central Computer Lab in GIT in order to enhance learning abilities of the students.

**Background –** GIT was established with the aim of providing technical education for rural marginalised students so that they will be equipped with technical knowledge and skills, get better jobs for their economic growth and contribute to Indian industries for skilled human resource. The existing computer lab was small with 50 computers where students were using this facility in batches. Lack of upgraded version of software and configuration computer systems being slow meant that students were not able to complete their projects, assignments timely also practical sessions were not adequate.

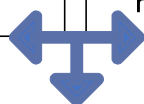
Against this backdrop, GCL has supported the upgradation of the Central Computing Facility (CCF)

## Intervention- Upgradation of Central Computing Facility (CCF)



Qualitative data gathered from students, faculties and Principal was analysed to understand how upgradation of Central Computing Facility impacted to improve learning abilities and enhancement of problem-solving skills through practical sessions. Captured data has been presented below with before after situation method and post analysis, specific outcome and impact areas have been noted.

Before	After
<ul style="list-style-type: none"> <li>Students were lagging behind in completion of the study projects due to not having easy access of internet and computers</li> <li>Shortage of PCs (50 available pcs, with some low configuration)</li> <li>Labs were not always dedicated to specific courses, leading to conflict in scheduling</li> <li>Earlier PCs were of Lenovo and they had issues of hardware and software</li> <li>Some classrooms lacked projectors and routers</li> <li>Classroom lacked adequate Acs, speakers and other equipment.</li> </ul>	<ul style="list-style-type: none"> <li>Students are able to complete their assignment and projects on time.</li> <li>75 new PCs provided (in total 150), divided across labs to accommodate student needs</li> <li>Labs are now allocated with buffer labs and computers for specific courses</li> <li>Ability to track student activity and internet usage in real-time</li> <li>Convenient to access internet for literature review, references and study material</li> <li>Facilities are able to train students with practical sessions</li> <li>Students use labs for projects and practice during their free time</li> <li>Some classrooms have the facility of projector and routers but not uniform across the classrooms</li> </ul>



Impact
<ul style="list-style-type: none"> <li>Increased productivity and efficiency of students to discover facts, innovation and reference material for their projects</li> <li>Adequate PCs available, labs equipped for ML, AI, and other engineering courses</li> <li>Reducing scheduling conflict, smoother lab usage for ML, AI and computer engineering students</li> <li>The central computing facility, equipped with 100 PCs in a single location, is utilized for conducting online government examinations such as CET, GATE, JEE, IIP and banking exams</li> <li>As candidates from diverse backgrounds outside the institute visit the GIT campus, it is increasing our visibility and exposure to the wider public.</li> <li>Fostered students' interest in learning.</li> <li>A positive attitude towards the institute is gradually developing among public in general e.g. parents from various parts of Maharashtra come for enquiry about courses available in institute, students' participation in various academic competitions.</li> <li>Enhance the quality of projects, reflecting improved understanding and innovation</li> <li>Students face challenges with theory class where routers and projectors are still missing</li> <li>Partial improvements in labs (AC speakers, enough chairs) but further upgrades needed for better comfort during practical sessions</li> </ul>





# 04

Location: Khed  
Implementing Partner:  
Gharda Foundation

## CSR Projects Promotion of Health Care Services



### Strengthening Health Facility

## Introduction

Gharda Chemicals Limited supported Gharda Foundation to promote education and health, social welfare projects in the rural areas of Maharashtra. As a part of social initiatives of Gharda Foundation the Bai Ratanbai Gharda Hospital (BRBGH) at Khed was established in year 2017 to tackle healthcare challenges faced by rural populations, where limited access to medical facilities and resources often resulted in poor health outcomes. Based on this backdrop, a healthcare program was designed with the aim to improve awareness on health issues, provide essential medical care and ensure timely intervention for unprivileged communities



### Objectives of the BRBG Hospital

- To ensure timely and equitable access to quality healthcare services, particularly for marginalized population.
- To provide emergency service care, referral services and patient transportation.
- To engage communities and other stakeholders to promote preventive healthcare system at community level.

### Intervention undertaken during year 2023-24

- Deployment of additional ambulance with appropriate equipment.
- Formed advisory committee comprised of nearby industrial representatives to strengthen healthcare services. Nearly 20 companies participated in advisory committee meeting
- Repaired Sewage treatment plant (STP)
- New services introduced Dental care and Ophthalmology
- Promoted health camps and outreach programs in new villages (6)
- Pick-up and drop services for dialysis, surgery and maternity patients
- Collaboration with 4 new MIDC companies within the radius of 5 to 6 km, for medical check-up, occupational health centre
- Satellite OPD in four villages
- Appointed Female Gynaecologist



In order to assess the impact of healthcare services provided by hospital, focus group discussions were conducted with patients and staff members. Based on the qualitative data received, analysis was done and results were categorized under outcome and impact. The findings revealed are based on the perceptions of the respondents. 2 FGD and 30 in depth interviews with patients were conducted.

### Outcomes of the Intervention

- Easy accessibility to healthcare facility - Respondents mentioned that the hospital provides an ambulance service directly to their doorstep, arriving promptly after a call, unlike before when patients had to wait a long time. This improvement has saved time and allowed access to timely treatment. From the patients' perspective, it was also observed that the hospital has introduced healthcare services like Ophthalmology and Dental departments, making these facilities easily accessible. Previously, they had to travel to Khed city, incurring expenses of around Rs. 500 or more for travel and consultation. This has resulted in significant savings in both time and money. 92 general health camps were conducted. 3,593 patients attended the camp and over 3200 patients attended during door-to-door intervention
- Early detection and prevention- The hospital has organized eye and dental screening camps which has helped for timely detection and treatment. Patients also mentioned that they have benefited in the area of emergency services especially in case of accidents and minor injuries
- Women and health care- Patients shared that the newly established gynaecology department and the availability of a gynaecologist have greatly benefited women from nearby villages by providing treatment for gynaecological issues and deliveries. Some mentioned that pregnant women regularly visit the hospital for check-ups. They also highlighted the specialized gynaecology camps that have been conducted, which have improved their comfort and access to expert maternal and reproductive care.
- Engagement of Industries and employee health check-up. Initially, promotional activities for visibility were limited. To expand reach and increase awareness of the services, management intensified efforts through outreach campaigns, including health camps, mobile dispensaries, and health talks. Outreach staff consistently engaged nearby industries, leading to collaborations where the hospital now provides annual health check-ups for employees and general health services for their families. These efforts have facilitated early diagnosis and treatment, resulting in greater satisfaction among the respondents.
- Outcome of revised Business Development Strategy.
- The initial approach, with fewer visits to companies, resulted in a limited patient influx of 4-5 patients per month. However, the Business Development team successfully covered 157 villages, enhancing awareness and engagement within the community. After implementing a revised strategy that included repeat visits to companies, patient numbers surged to 72-100 per month, reflecting a substantial improvement in outreach and service utilization.
- Improved Sanitation and Safety with Sewage treatment plant repair
- The repair of the sewage treatment plant has improved wastewater management, ensured a cleaner environment and reduced health risks for hospital patients and staff.



## Impact of Interventions by BRBGH

- The impact of BRBGH's interventions was evaluated based on respondents' perceptions, focusing on both immediate outcomes and long-term benefits:

### Improved Health Seeking Behaviour

There has been a notable shift in the community's approach to healthcare, with an increasing number of individuals seeking medical consultation at earlier stages to prevent complications. This change is largely attributed to the organization of health camps, the availability of specialized doctors, and ongoing health awareness sessions. Previously, many community members had a tendency to overlook their health concerns, even when unwell, adopting a "let it go" attitude. However, after regular engagement with BRBGH's outreach staff, this behaviour is steadily changing, and more people are now prioritizing timely medical consultations.

### Strengthening the connection Between Hospital and Community

Data analysis shows that the hospital's efforts to improve services—such as enhancing healthcare education, providing better ambulance services, and fostering stronger ties with village leaders—have contributed to increased community engagement with the hospital. The hospital's friendly and approachable team has further strengthened this relationship. As a result, the hospital saw a rise in admissions from 960 in 2022-23 to 1,661 in 2023-24, while outpatient visits (OPD) surged from 2,653 in 2022-23 to 4,447 in 2023-24. Number of surgeries has increased from 2 to 3 per month in 2022—23 to 7-10 a month in 2023-24.

### Deployment of Additional Ambulance

The deployment of additional ambulances has significantly improved emergency response times in the villages, ensuring that patients receive timely care during critical situations. This has not only enhanced patient outcomes by facilitating early treatment but has also saved villagers money that would have otherwise been spent on delayed or alternative emergency services.

- Impact of Dialysis department- The establishment of the dialysis department at the hospital has greatly benefited nearby villagers, who previously had to travel to Khed or Chiplun for treatment. Additionally, some patients from Khed and Chiplun now choose to come to the hospital due to government facility Under MJPJAY (Mahatma Jyoti Rao Phule Han Arogya Yojana) free of cost dialysis treatment provided to patients
- The treated water draining into the plants around the hospital nourishes the surrounding greenery, promoting healthier plant growth.



## Annexure I

### • SAMPLE SIZE TABLE

Implementing Agency	Location	Project	Beneficiaries	Quantitative sample	Qualitative sample covered	Total
Gharda Chemicals (direct implementation)	Lote-Khed	Drinking water	Women & Villagers	60	20	80
		School Support	Students		20	20
			Principal		2	2
		Environment education	Students	70	20	90
			Organization staff		3	3
Integrated rural development Ankleshwar	Panoli	Adolescent health care	Adolescent girl/women	40	30	70
		BAIF	Farmers	40	20	60
			AIT		3	3
		Solar Project	Villagers		20	20
International Longevity Centre	Pune	Elderly care	Senior Citizens	50	30	80
			Staff		2	2
BAIF	Pune	Promotion of Artificial insemination	Farmers	20	10	30
	Satara		Farmers	20	10	30
	Jalgaon		Farmers	20	10	30
	Ahmednagar		Farmers	20	10	30
	Dharashiv		Farmers	20	10	30
			Program Executive		1	1
			AIT		3	3
			Program officer		1	1
Gharda foundation	Lote, Khed	GIT College	Students		20	20
			Principal		1	1
			Teachers		2	2
		Gharda Hospital	Patients		25	25
			Hospital Admin		1	1
			Staff		2	2
		Agriculture	Farmers	40	40	80
Total				400	316	716

## Annexure II

### CSR Grant provided by GCL

Implementing Organisation	Project	CSR Grant (Rs. in La FY 202324
1. GCL- Lote	Integrated Rural Development	350.70
2. GCL Panoli	Integrated Rural Development	60.37
3. Gharda Foundation	Agriculture Educationand Health	110.10
4. International Longevity Centre	Elderly Care	25.00
5. BAIF	Promotion of artificial sorted Semen	51.66

