INDO COUNT

Complete Comfort

IMPACT ASSESSMENT REPORT

SoulAce

Path to Sustainability

SOULACE CONSULTING PVT. LTD.

Executive Summary

HEALTH & SANITATION

Project Background

Guided by the key philosophy that "Every Smile Counts," Indo Count Industries has established the Indo Count Foundation (ICF) and a dedicated CSR Committee to uplift the communities neighbouring its manufacturing facilities. With a primary focus on healthcare and sanitation, the foundation aims to redefine accessibility and inclusiveness of healthcare, ensuring equitable access to essential healthcare and sanitation services for all individuals.

Through partnerships with government healthcare centres, social enterprises, local Self-Help Groups (SHGs) and NGOs, ICF implemented a range of initiatives aimed at improving critical health outcomes and promoting hygiene practices in the nearby communities of Vapi (Gujrat) and Kolhapur (Maharashtra). Most initiatives are implemented during the FY 2022-23 while some healthcare projects assessed in this report are long-term spanning more than 5 years.

This report enlists ICF's social initiatives, which include improving existing Public Healthcare Centres (PHCs) with infrastructure and financial support, conducting programs on preventive healthcare measures through Mobile Medical Vans (MMV) and supplying nutritional kits to patients suffering from Tuberculosis under the "TB Free India -2025" Campaign of National Health Ministry. Additionally, recognising the precarious situation of sanitation infrastructure in rural schools, ICF undertook the mission to build toilets, provide clean water facilities and promote hygiene practices in 10 schools of Kolhapur district in Maharashtra.

Project Activities

HEALTH

Mobile Van Program in Kolhapur, Maharashtra:

ICF, in partnership with Wockhardt Foundation, commissioned 4 Mobile Medical Vans (MMV) in 4 clusters of villages in Kolhapur to conduct general health check-ups and provide diagnosis and cure for blood pressure, haemoglobin levels, malaria, diabetes, cataracts, fever, cough, cold and dengue, dressing of wounds and typhoid etc.

MMV staff included doctors and nurses and provided free-of-cost services to the patients in its daily community rounds. In critical cases, the doctors also referred patients to authorised medical centres.

MMV covered 10,15,827 residents in 96 villages during FY 2016-2024 to spread awareness on Tuberculosis, mother and child healthcare, immunisation, deworming, vector-borne diseases, hepatitis, common cardiac diseases, etc.

Conducted weekly sessions on health and hygiene practices with women and children, girls, and adolescents of the community in the local language.

Health Centre and Facility Upgradation of Government Hospitals:

ICF identified two rural hospitals in Kolhapur, Maharashtra, to renovate existing healthcare infrastructure.

ICF supported the hospitals to upgrade their medical facilities and equipments in Cardiology, Gynecology & HIV/AIDS units and renovate vaccination areas to increase capacity of patients.

Support through Nutrition Package for TB patients in Vapi, Gujarat:

ICF engaged local social enterprises and Self-Help Groups to supply nutritional kits to support TB patients in Bhilad and Vapi of Valsad district of Gujarat. The program was implemented in 2 phases, each during FY 2022-23 and FY 2023-24.

314 patients identified by the local municipality for nutritional support. Each nutritional kit included:

- 500 ml Groundnut Oil
- 1.5 Kg Yellow Moong Dal
- 1 kg Peanuts
- 3 kg Mataji Rice
- 1 kg Sukhadi

WASH

Drinking Water and Sanitation Program in Kolhapur, Maharashtra:

ICF identified 9 High Schools from 5th-12th grade in 6 villages of Kolhapur district to directly implement its WASH initiatives. Three out of the ten schools were all-girls schools.

Constructed 60 toilets and 89 urinals in the identified schools.

Regular school cleaning drives, along with Hand Washing Week and World Environment Day.

Project Details

COMPONENT: HEALTH

Financial Year of Impact Assessment: FY 2023-24

Project Name	Mobile Medical Van Program	Health Centre and Facility Upgradation of Government Hospitals	Support through Nutrition Package for TB patients
Implementation Year	FY 2016-2024	FY 2017-2022	FY 2022-2024
Beneficiaries	6,43,721 Patients	-	504 TB patient Beneficiaries
Implementing Partner	Wockhardt Foundation	Indo Count Foundation	RF Enterprise and RF Daily Mart, Jai Jalaram Swa Swahay Juth
Project Location	Kolhapur (Maharashtra)	Kagal & Kolhapur (Maharashtra)	Vapi, Bhilad (Gujarat)

COMPONENT: WASH

Financial Year of Impact Assessment: FY 2023-24

Project Name	Drinking Water and Sanitation Program
Implementation Year	FY 2022-23
Beneficiaries	16,1 34 Students
Implementing Partner	Indo Count Foundation
Project Location	Kolhapur, Maharashtra

SDG Goals

Design Snapshot

COMPONENT: HEALTH

<table>
<tr><td colspan="2">Project Name:
Mobile Medical Van Program</td><td rowspan="2">Project Name:
Health Centre and Facility Upgradation of Government Hospitals

Research Design:
Qualitative Method - Descriptive research design</td><td colspan="2">Project Name:
Support through Nutrition Package for TB patients</td></tr>
<tr><td colspan="2">Sampling Methodology:
Purposive and Random stratified sampling</td><td colspan="2">Sampling Methodology:
Purposive and Random stratified sampling</td></tr>
<tr><td>Research Design:
Descriptive research design</td><td>Sample Size:
250</td><td>Research Design:
Descriptive research design</td><td>Sample Size:
40</td></tr>
</table>

COMPONENT: WASH

Project Name: Drinking Water and Sanitation Program	
Sampling Methodology: Purposive and Random Stratified sampling	
Research Design: Descriptive research design	Sample Size: 250

OT UNIT

Key Output

MMV reached 10,15,827 residents in 96 villages of 4 blocks (Kolhapur District) to spread awareness on Tuberculosis, mother and child healthcare, immunisation, deworming, vector-borne diseases, hepatitis, common cardiac diseases, etc.

6,43,721 patients diagnosed with MMV improved their health outcomes with treatment.

Increased footfall by 3 times in CPR Hospital (Kolhapur) and Rural Hospital (Kagal) after medical infrastructure support.

Increased health outcomes of patients with improved testing, counselling, and antiretroviral therapy (ART) services in HIV/AIDS units, the gynaecology department, and the cardiology department of CPR Hospital (Kolhapur).

504 TB patients from Vapi (Gujarat) were supported through free-of-cost nutritional kits and regular medical counselling under the campaign "TB Free India -2025".

12,280 students of 5th – 12th grade across 10 schools in 6 villages (Kolhapur District) benefitted from the construction of 48 toilets and 89 urinals under the WASH intervention.

Key Impact

Increased awareness about key health issues and communicable diseases.

Increased accessibility of healthcare services.

Improved identification of patients suffering from communicable diseases, TB and chronic health issues and referral to authorised hospitals.

Increased health outcomes among patients suffering from communicable diseases, TB, and chronic health issues.

Increased number of adolescents engaged in safe drinking practice, behaviors of good health and hygiene to prevent illnesses.

EDUCATION

Project Background

Wockhardt Foundation, in collaboration with the Indo Count Foundation, initiated a comprehensive intervention aimed at elevating the quality of education within schools. This initiative primarily focused on providing e-learning facilities and improving WASH infrastructure, particularly through the construction of toilets in selected schools in the Kolhapur district of Maharashtra. The overarching objective of the intervention was to enhance students' academic performance within a conducive school environment facilitated by the introduction of e-learning resources.

Research Design Snapshot

Project Name
Indo Count e-Learning

Research Design
Mixed method

Sampling Methodology
Purposive random sampling

Sample Size
266 student beneficiaries, 40 teachers, and 13 parents

Project Details

Implementation Year
FY 2021-22

Assessment Year
FY 2023-24, 2022-23

Beneficiaries
School children, teachers and parents

Location(s)
Bilhad & Kolhapur

Budget
Rs.2,24,20,001 for 59 schools

Implementing partner
Wockhardt Foundation

SDG Goals

Key Findings

Females constitute a majority, comprising 58.6% of the total beneficiaries, while males account for 41.4%.

70.0%

of respondents are enrolled in the 7th to 9th standard, with more than 20% in the 4th to 6th grades.

43.0%

of students attended e-learning classes on a daily basis, while 39.5% attended once a week.

94.0%

of the most attended subject in e-learning classes was Maths, followed by history (81.6%) and language (79.7%).

The frequency of respondents attending schools increased from 93.2% to 94.7% after the e-learning program.

48.5%

of respondents reported that after the e-learning program, students were able to do their assignments and study independently.

95.9%

of students reported noticing improvement in their mathematical skills after the e-learning program across all grades.

Key Impact

97.0%

of students noted improvements in their reading skills, ranging from some improvement to significant enhancement.

78.9%

of students expressed the ability to discuss doubts, leading to increased confidence and a more positive attitude.

71.8%

of Students expressed that the e-learning program facilitated their understanding of complex passages.

86.8%

of students reported an increased motivation to attend school regularly.

IMPACT GAUGED FROM QUALITATIVE DATA

Enhanced students' academic achievements and enthusiasm for attending school were achieved by implementing e-learning resources, resulting in improved educational results and prospects.

Improved student health and hygiene habits were facilitated by the installation of toilet facilities within schools.

Reduction in instances of dropouts and increased enrolment and attendance of students in school foster a conducive school environment.

ENVIRONMENT

Project Background

The Indo Count Foundation launched a comprehensive intervention to enhance the environment in the vicinity of the Kagal Maharashtra Industrial Development Corporation (MIDC) factory in Maharashtra. This initiative focused on implementing a plantation program using the Miyawaki method, with the primary goal of creating a fully-fledged garden in the area and nurturing and maintaining it across the nearby region. The overarching objective of the intervention was to reduce carbon emissions and subsequently lower the temperature in the surrounding area.

Project Details

Implementation Year
FY 2022-23

Assessment Year
FY 2023-24

Beneficiaries
Communities residing near the region of the factory

Location(s)
Kagal, Maharashtra

Budget
Rs. 23,00,000/-

Implementing partner
Indo Count Foundation

Research Design Snapshot

Project Name
Indo Count environment program

Research Design
Qualitative method

Sampling Methodology
Purposive random sampling

Sample Size
20

SDG Goals

FLOWERING PLANT IN KAGAL MIDC

Key Findings

13,500 plants were planted across 5 acres of land, enhancing the biodiversity of the area.

The increase in the diverse flora and fauna has significantly enhanced the beautification and aesthetic appeal of the area.

Key Impact

Improved overall health of the community with the reduction in carbon emissions and temperature.

Improved well-being of community members with the presence of greenery and lower temperatures.

AGRICULTURE: GAGAN PROJECT

Project Background

The GAGAN Project is a sustainable initiative by Indo Count Foundation implemented in Maharashtra's cotton-producing regions. The project, which began to uplift farmers and promote sustainable cotton cultivation practices, operates in Warora and Bhadravati tehsils of Chandrapur district, Anjanagaon tehsil of Amravati district, and Malkapur and Chikhali tehsils of Buldhana district, all in the Vidharbha region. Cotton farmers face significant challenges, including low productivity, limited access to modern techniques, and market constraints. Recognising the need to support farmers and improve cotton farming sustainability, the project focuses on imparting knowledge and skills related to sustainable agricultural practices through the Better Cotton Initiative (BCI) system. The project aims to empower farmers, improve their livelihoods, and promote environmental conservation through partnerships with technical agencies like CITI-CDRA, training programmes, and community engagement initiatives. Capacity building for sustainable farming techniques, access to quality inputs, and market linkages are all important interventions. The impact assessment reveals significant positive outcomes at several levels. Farmers' cotton yield, income, and access to healthcare and education have all improved. Sustainable practices have resulted in environmental benefits, such as soil conservation and water management. The project's success in improving farmers' economic and social well-being demonstrates its relevance and effectiveness in meeting the needs of rural communities. The project intends to increase its interventions, reach more farmers, and contribute to sustainable agriculture and rural development.

Key Project Activities

- Baseline Surveys
- Mobilisation of farmers for training
- Monitoring of crops
- Periodic Soil Testing
- Community Engagement
- Farmer Training Workshops
- Technical Assistance
- Capacity Building Programs
- Access to Inputs
- Market Linkages
- Monitoring and Evaluation
- Knowledge Sharing
- Sustainability Planning

Project Details

Implementation Year
2019-2023

Assessment Year
2023-2024

Beneficiaries
Approx. 25,000 Farmers

Location(s)
Chandrapur, Amravati, Buldhana and Parbani districts of Maharashtra

Implementing partner
Indo Count Foundation

SDG Goals

Research Design Snapshot

Project Name
Agriculture development & Livelihood (Project GAGAN)

Research Design
Descriptive Research design

Sampling Methodology
Purposive and Simple random Sampling

Sample Size
264 Farmers

"I've grown into a more confident and capable farmer, thanks to Indo Count's unwavering support. Adopting sustainable farming methods has increased my yields and decreased my costs. I'm grateful to Indo Count for providing us with the resources we need to secure our financial future and the prosperity of our community.

(Manohar Laxman Dhanorkar, A Cotton farmer)."

GINNING MILL

Key Outcomes

Over two years, farmer income increased by 31% due to the project.

Cotton yields have increased across all categories, from less than 5 quintals to over 20 quintals per acre.

Cotton ball waste has decreased significantly, with 55.7% of respondents reporting a significant reduction.

After the intervention, 29.5% and 93.2% of respondents switched to organic pesticides and fertilisers, indicating a shift towards sustainable agriculture.

According to 38.6% of respondents, the project helps farmers afford better healthcare.

Farmers can invest in productive assets like animals (34.8%), vehicles (34.0%), and land (4.5%), indicating economic stability and asset acquisition.

"As a cotton farmer deeply immersed in the challenges and uncertainties of the industry, I've encountered numerous hurdles along the way. However, my perspective and approach underwent a remarkable transformation after participating in the cotton farming training program facilitated by Indo Count".

(Omprakash Sonone, A Cotton Farmer)

Key Impact

Adopting sustainable farming practices has resulted in a significant increase in cotton yield per acre.

Cotton farmers' incomes have increased as productivity and market linkages have improved.

Better income and economic stability have improved farmers' livelihoods, reducing poverty and vulnerability.

Increased income has allowed farmers to provide better healthcare and education for themselves and their families.

Sustainable agricultural practices have helped for soil conservation, water management, and preserve biodiversity.

The project has promoted social cohesion and community development by encouraging collective action and participation in sustainable agriculture.

The project has helped to boost rural economies by increasing agricultural productivity and market access.

Adopting climate-smart agricultural practices has increased farming communities' resilience to climate change impacts.

Initiatives for knowledge sharing and capacity building have given farmers the skills and resources to manage their agricultural activities sustainably.

HEALTH & SANITATION

CONTENTS

01. ABBREVIATIONS

CSR	Corporate Social Responsibility
NGO	Non-Governmental Organization
SDGs	Sustainable Development Goals
WASH	Water, Sanitation, and Hygiene
ICIL	Indo Count Industries Limited
ICF	Indo Count Foundation
TB	Tuberculosis
MMV	Mobile Medical Vans
MoHFW	Ministry of Health and Family Welfare

CHAPTER 2
INTRODUCTION

BACKGROUND & NEED OF THE PROGRAM

Access to quality healthcare services and proper sanitation facilities is not only a basic human right but also crucial for fostering healthy and productive communities. However, cumulative stressors such as geographical remoteness, proximity to an industrial unit and limited financial capacity can exacerbate the existing health inequity gap faced by marginalised communities. Additionally, it has been observed that communities living alongside industrial areas often bear the brunt of environmental burdens while lacking access to adequate healthcare services, resulting in an increased rate of chronic diseases such as Tuberculosis and vector-borne diseases.

Recognising the integral connection between the well-being of communities and sustainable business practices, ICF endeavours to address the need for healthcare and WASH interventions. Through partnerships with government healthcare centres, social enterprises, local Self-Help Groups (SHGs) and NGOs, ICF has implemented a range of initiatives under the components:

IMPROVING HEALTH OUTCOMES

- Mobile Medical Van Program.
- Health Centre and Facility Upgradation of Government Hospitals.
- Support through Nutrition Package for TB patients.

IMPROVING HYGIENE PRACTICES THROUGH WASH

- Drinking Water and Sanitation Program.

By prioritising such initiatives, ICF aims to create a positive impact on the lives of individuals and families in the communities of Vapi (Gujarat) and Kolhapur (Maharashtra).

OBJECTIVES OF THE PROGRAM

IMPROVING HEALTH OUTCOMES

To improve health outcomes of residents from vulnerable communities of Kolhapur (Maharashtra) through accessible and affordable healthcare services.

To improve the public health infrastructure by financially upgrading the government health centres and facilities.

To jointly work with the health department and participate in realising the objective of "TB Free India -2025" campaign by supporting TB patients recover completely with nutritional packages.

IMPROVING HYGIENE PRACTICES THROUGH WASH

To improve the sanitation infrastructure in schools and create a conducive environment for students to learn.

To improve overall health and well-being by generating awareness on clean drinking water and hygiene practices.

ABOUT INDO COUNT

Established in 1988, Indo Count Industries Limited (ICIL) stands out as a prominent figure in the textile sector with over 25 years of experience. The company operates from Gujarat and specialises in an array of products, such as bed linens, towels, and rugs.

ICIL is deeply committed to corporate social responsibility (CSR); the Indo Count Foundation (ICF), an initiative by ICIL, is dedicated to driving positive change in surrounding communities and the environment. From supporting schools and educational programs to providing healthcare facilities and promoting sustainable practices, ICF strives to make a meaningful difference in the lives of people. Its comprehensive CSR efforts reflect Indo Count's commitment to being a responsible corporate entity while creating lasting social and environmental value.

ABOUT IMPLEMENTING AGENCIES

ICF commissioned the Wockhardt Foundation in 96 villages of Kolhapur (Maharashtra) to deliver MMV services. Wockhardt Foundation is a non-profit organisation established by Wockhardt Limited, a leading global pharmaceutical and biotechnology company. The foundation operates across various sectors, including healthcare and education to vulnerable communities.

Wockhardt Foundation's MMV services serve as lifelines for those residing in remote areas where access to healthcare facilities is limited. The vans include a team of doctors, nurses, and healthcare professionals, offering a wide array of healthcare services, including general health check-ups, diagnosis, treatment, and preventive care.

ICF partnered with the Ministry of Health and Family Welfare (MoHFW) to eradicate tuberculosis disease in the country by 2025. ICF undertook the program to support patients suffering from TB in Vapi of Bhilad (Umargram Taluka) near its manufacturing plant. The company commissioned RF Enterprise and RF Daily Mart to supply and deliver nutritional packages (cereals and oil) to patients. ICF engaged Jai Jalaram Swa Swahay Juth (SHG) to supply Sukhadi (local chicki) in the nutrition kit.

MOBILE HEALTH VAN IN KAGAL

CHAPTER 3
RESEARCH METHODOLOGY

Interaction with medical officer

ICF commissioned SoulAce to assess the impact of its CSR initiative. The Health and Sanitation Program across villages spanning the Vapi (Bhilad) and Kolhapur manufacturing plants was implemented by the company through direct interventions and, in a few areas, implemented through NGO partners, local social enterprises and the government healthcare department. Most initiatives are implemented during the FY 2022-23, while some healthcare projects are long-term, spanning more than 5 years.

MIXED METHODS APPROACH

This study utilised a mixed-methods approach, incorporating both qualitative and quantitative research methods. The qualitative component delved into subjective experiences and perspectives, providing a nuanced understanding of beneficiary views. Meanwhile, quantitative methods facilitated the collection and analysis of numerical data, yielding statistical insights and identifying trends. The study's research design was descriptive, aiming to present a detailed situational analysis and exploration of the various facets of the Health and Sanitation program. Descriptive research is apt for creating an overview, discerning patterns, and grasping the current state of affairs. By integrating both qualitative and quantitative research methodologies within a descriptive framework, the study aimed to deliver a thorough evaluation of the program, elucidating its impact, and suggesting avenues for enhancement. This methodological blend ensured a holistic examination of the subject, lending both depth and breadth to the findings and bolstering the study's credibility.

ENSURING TRIANGULATION

To enhance the reliability and validity of its findings, the study implemented various triangulation techniques. Data triangulation was achieved by gathering information from diverse sources, including survey methods among the beneficiaries and interviews with healthcare staff. This extensive data collection facilitated a comprehensive evaluation of the program's impact.

Methodological triangulation was also employed, utilising a variety of research methods such as surveys and interviews. This approach allowed for cross-verification of information and helped mitigate potential biases. Through these triangulation strategies, the study ensured a robust and dependable analysis, reinforcing the trustworthiness of its findings.

RESEARCH DESIGN

COMPONENT: HEALTH

<table>
<tr><td>Name of the Project:
Mobile Medical Van Program</td><td>Name of the Project:
Health Centre and Facility Upgradation of Government Hospitals</td><td>Name of the Project:
Support through Nutrition Package for TB patients</td></tr>
<tr><td>Implementing Organisation:
Wockhardt Foundation</td><td>Implementing Organisation:
Indo Count Foundation</td><td>Implementing Organisation:
• RF Enterprise and RF Daily Mart
• Jai Jalaram Swa Swahay Juth</td></tr>
<tr><td>Research Design Used:
Mixed Method - Descriptive research design</td><td rowspan="3">Research Design Used: Qualitative Method - Descriptive research design</td><td>Research Design Used:
Quantitative Method - Descriptive research design</td></tr>
<tr><td>Sampling Technique:
Purposive and Random stratified sampling</td><td>Sampling Technique:
Purposive and Random stratified sampling</td></tr>
<tr><td>Sample Size: 250</td><td>Sample Size: 40</td></tr>
<tr><td>Qualitative Methods Used:
Key Informant Interview & Testimonials</td><td>Qualitative Methods Used:
Key Informant Interview & Testimonials</td><td>-</td></tr>
</table>

COMPONENT: SANITATION

Name of the Project: Drinking Water and Sanitation Program
Implementing Organisation: Indo Count Foundation
Research Design Used: Mixed Method - Descriptive research design
Sampling Technique: Purposive and Random stratified sampling
Sample Size: 250
Qualitative Methods Used: Key Informant Interview & Testimonials

KEY STAKEHOLDERS

OBJECTIVES OF THE STUDY

The primary objectives of the study were to:

Measure the immediate impact of the several Healthcare programs on the health outcomes of the target communities.

Measure the extent to which the program has contributed to improving awareness and knowledge among community members regarding health and hygiene practices.

Evaluate the long-term impact of the Sanitation program on the overall well-being and quality of life of the beneficiaries.

Measure the program's effectiveness in achieving its stated objectives by assessing factors such as program reach, efficiency of resource utilisation, and alignment with best practices in the field of public health and sanitation.

Review the sustainability aspects of the program model and formulate strategic recommendations.

STUDY TOOLS

Questionnaire for Primary Beneficiaries:
Structured questionnaires were developed, the project details for each of the focus areas were reviewed, and indicators were pre-defined before conducting the surveys.

Questionnaires for secondary beneficiaries and stakeholders:
A semi-structured questionnaire was developed for key stakeholders. One-on-one discussions were conducted with beneficiaries to prepare testimonials.

COMMITMENT TO RESEARCH ETHICS

Anonymity

Anonymity refers to not revealing the identity of the respondents. This research study strictly sticks to not revealing the identity of respondents unless the same is warranted for the illustration of success stories or case studies.

Confidentiality

After the research was completed, the study did not reveal which individual respondents answered which question in what manner. The results were revealed only as an aggregate, so no one would be able to single out the identity of a particular respondent. This was required to not break the trust of the respondent by not revealing the individual identity. Research subjects participate in the process only based on the trust that confidentiality is maintained. Hence, the research would not reveal any data regarding the respondents for purposes other than the research study.

Non-Maleficence

Research would not lead to harm to the research subjects. This study ensured that the respondents were not harmed in any way.

Justice

Justice refers to being fair to all. This research study ensures equal treatment of all its research subjects and no biases or prejudices towards any group based on social stereotypes or stigma associated with being a member of a certain group or class.

CHAPTER 4
MAJOR KEY FINDINGS

The chapter explores the various components of the Health and Sanitation Program of ICF and its implementation partners, focusing on accessible healthcare, reduced inequalities due to the interventions, the overall well-being of the beneficiaries and changes in health-seeking behaviours in the community.

Geographical Coverage

Villages of Kolhapur District (Maharashtra)
Villages in Vapi of Bhilad District (Gujarat)

Outreach and Inclusivity

- TB Patients
- Adolescent students (5th – 12th Grade)
- Community residents of Vapi, Bhilad (Gujarat) and Kolhapur (Maharashtra)

PRE-INTERVENTION

According to a 2021 WHO report, 10.6 million people developed active tuberculosis disease and 1.6 million deaths were caused by Tuberculosis. TB is marked to be one of the ten major causes of mortality worldwide. Currently, India has the highest burden of TB in the world. The threat of communicable diseases is high in India due to reasons such as poor sanitation, poor hygiene, and lack of clean drinking water. Statistics show that about 1.2 billion people are vulnerable to falling sick due to communicable diseases like TB, Typhoid, Malaria, HIV, Hepatitis, etc. Vulnerable communities marked by poor socio-economic conditions and inadequate living standards are disproportionately affected by TB and other communicable diseases, posing an additional risk.

Addressing TB in these communities requires targeted interventions that not only focus on medical treatment but also tackle the WASH aspects in the communities for the overall well-being of an individual. The National Strategic Plan (2017–25) of India proposes bold strategies with commensurate resources to rapidly decline TB in the country by 2030. This is in line with the Global End TB targets and Sustainable Development Goals to attain the vision of a "TB-free India". The goal is to achieve a rapid decline in the burden of TB, morbidity and mortality while working towards the elimination of TB in India by 2025.

ULTRASOUND MACHINE

DEMOGRAPHY OF THE BENEFICIARY POPULATION

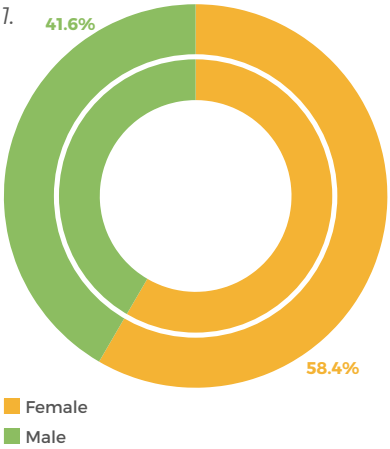
COMPONENT: HEALTH

Comparative analysis of the demographic profile of beneficiaries between the projects of the Mobile Health Van Program in Kolhapur and the Program for Support through Nutrition Package for TB patients in Vapi (Gujarat):

PROJECT NAME	MOBILE HEALTH VAN PROGRAM IN KOLHAPUR (MAHARASHTRA)	SUPPORT THROUGH NUTRITION PACKAGE FOR TB PATIENTS IN VAPI OF BHILAD (GUJARAT)

GENDER

Fig 1.



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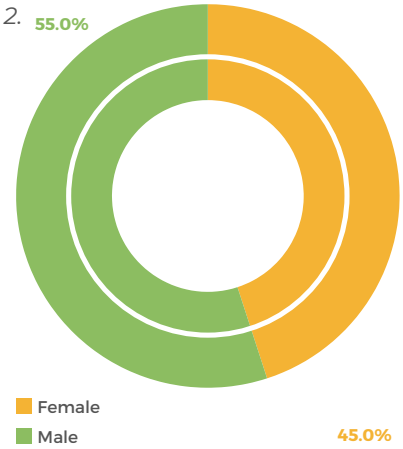


TOTAL NUMBER OF FAMILY MEMBERS

Fig 3.

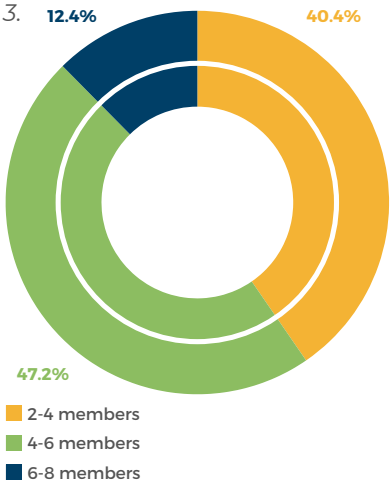
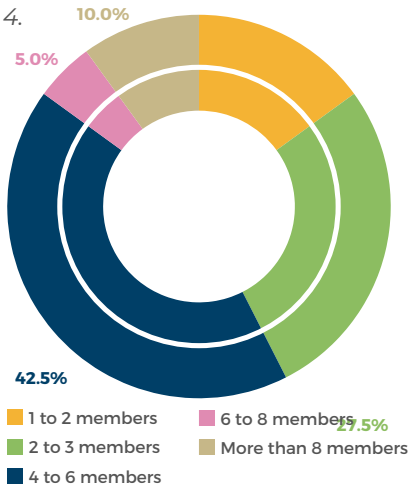


Fig 4.



OCCUPATION OF THE BENEFICIARIES

Fig 5.

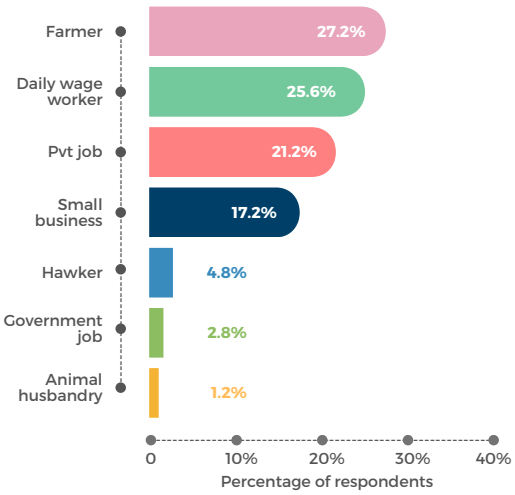
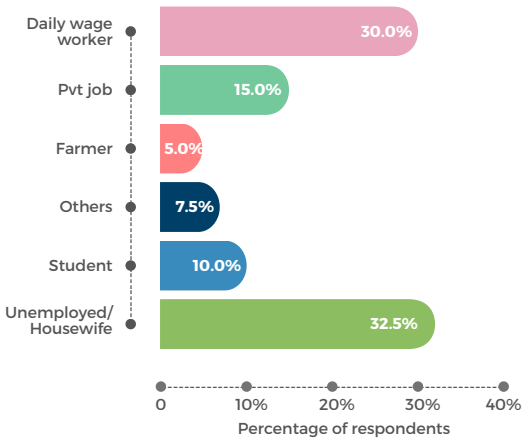


Fig 6.



Gender distribution reveals that female respondents are slightly higher in Fig 1 whereas several male respondents are higher in Fig 2. The distribution of family sizes indicates that a significant proportion of respondents come from families with 4-6 members in both programs. Families with more members may face challenges in accessing healthcare services increasing their vulnerability to communicable diseases like TB, Typhoid, Hepatitis etc.

The comparative analysis between the two sets of occupation data sheds light on distinct occupational profiles. Fig 5 predominantly comprises farmers, daily wage workers and individuals in private jobs. Fig 6 reveals a higher prevalence of unemployment/housewives and daily wage workers.

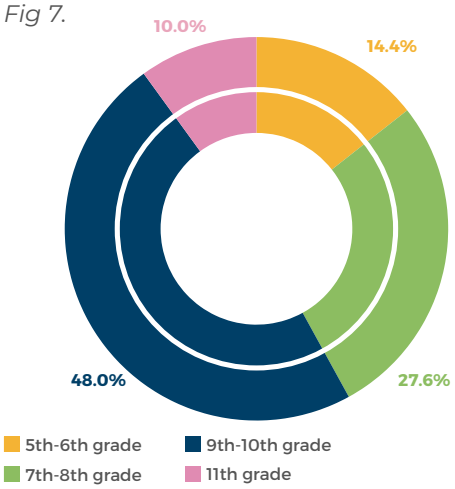
COMPONENT: WASH

PROJECT NAME

DRINKING WATER AND SANITATION PROGRAM

GRADE-WISE DISTRIBUTION OF RESPONDENTS

Fig 7.



Grade-wise distribution of students in Fig 7 highlights the prevalence of students belonging to the 9th-10th grade, covering almost half of the respondents.

PRINCES INDUMATI DEVI GIRLS HIGH SCHOOL & COLLEGE, KOLHAPUR

KEY PROGRAM INPUTS AND ACTIVITIES

PROGRAM IMPLEMENTATION

ICF implemented several programs under the components of Health and Sanitation in Kolhapur (Maharashtra) and Vapi (Gujarat).

Supported TB patients with nutritional packages and counselling services for complete recovery.

conducted an MMV program and upgraded the hospital infrastructure of Kolhapur.

Supported 9 schools with sanitation infrastructure and conducted WASH activities.

HEALTH INFRASTRUCTURE

Ensured the upgradation of medical equipment and PHC facilities in the communities despite the challenges faced during the COVID-19 pandemic.

Ensured the upgradation of sanitation infrastructure in identified schools by the construction of toilets, urinals, wash basins and clean drinking water sources.

ESSENTIAL HEALTHCARE SERVICES

Conducted TB Counselling sessions with patients.

Regular weight checking of TB patients at the time of delivering nutritional kits.

MMV was commissioned to conduct regular health check-ups in communities that provided disease screening, treatment, and referrals.

AWARENESS ON WASH PRACTICES

Conducted awareness sessions with students of grade 5-12 on hand-washing, World Environment Day, clean drinking water and WASH practices.

KEY IMPACTS

COMPONENT: HEALTH

PROJECT: MOBILE HEALTH VAN PROGRAM

STATUS OF HEALTHCARE ACCESS IN COMMUNITY

FIG 8: COMMON COMMUNICABLE DISEASES IN THE COMMUNITY

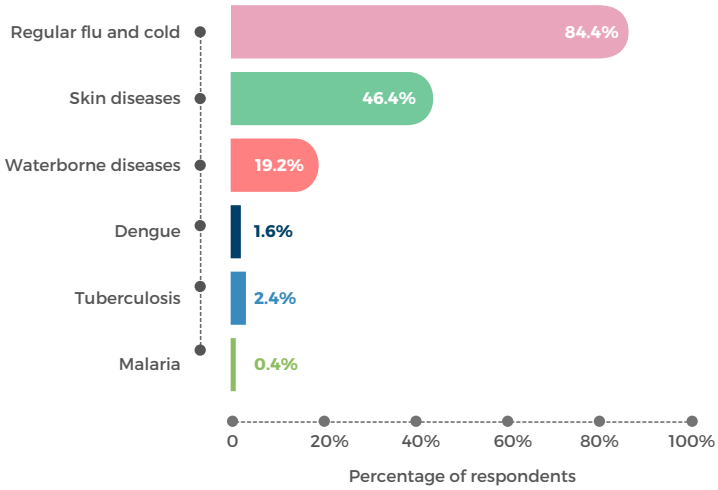


FIG 9: HEALTHCARE FACILITIES VISITED EARLIER IN CASE OF ANY MEDICAL ATTENTION WAS REQUIRED

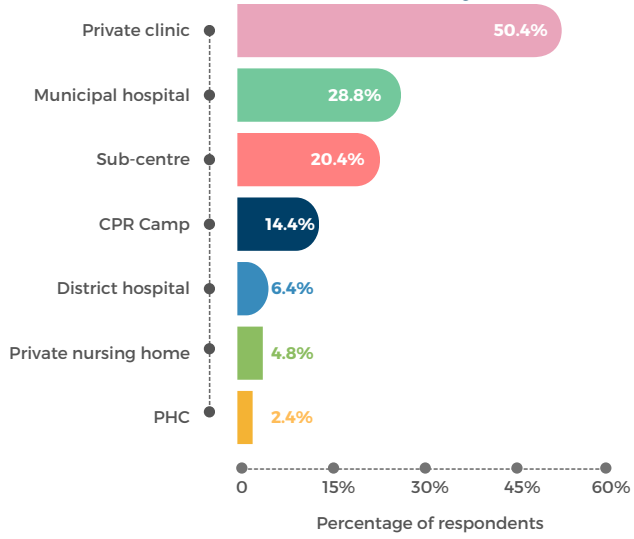


Fig 8 highlights the significant burden of communicable and chronic diseases such as regular flu and cold, which have the highest prevalence along with skin diseases and waterborne diseases. Alarmingly, field notes from the community indicate that a considerable portion of beneficiaries have been suffering from these diseases for extended periods. Fig 9 suggests that despite the prevalence of health problems, the accessibility of affordable healthcare facilities remained limited, with almost half of the respondents choosing to go to private clinics over government PHCs.

"Our Medical Van operates six days a week, providing essential medical care to villages in need. Through our dedicated efforts, we've witnessed a significant reduction in chronic diseases, such as fungal infections, arthritis, bronchitis, and asthma, among community members. Our services, which include general health consultations and medication, have led to an improved quality of life for many, with patients now relying less on quacks and private clinics for treatment."

Jaishree Tanaji Kadam (Nurse)

"At our school, teachers conduct regular inspections of our housekeeping materials, they check the availability of water and the functionality of taps daily, and our class monitors actively participate in maintaining cleanliness among students. We celebrate important days like World Environment Day and Hand-Washing Day."

Harichandra Ramchandra Satve, Headmaster, Nagojirao Patkar High School

CHALLENGES TO ACCESSING HEALTHCARE SERVICES

FIG 10: CHALLENGES FACED IN THE HEALTHCARE FACILITIES AT THE GOVERNMENT AND NONGOVERNMENT CENTRES

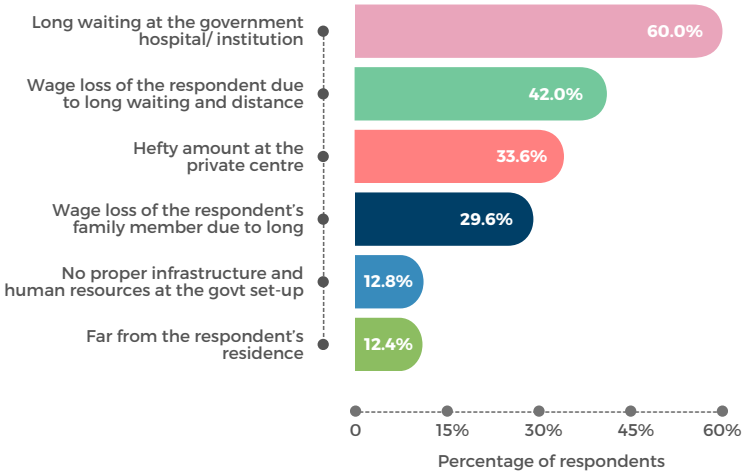


FIG 11: AVERAGE MONTHLY MEDICAL EXPENDITURE BEFORE THE MOBILE HEALTH VAN PROGRAM

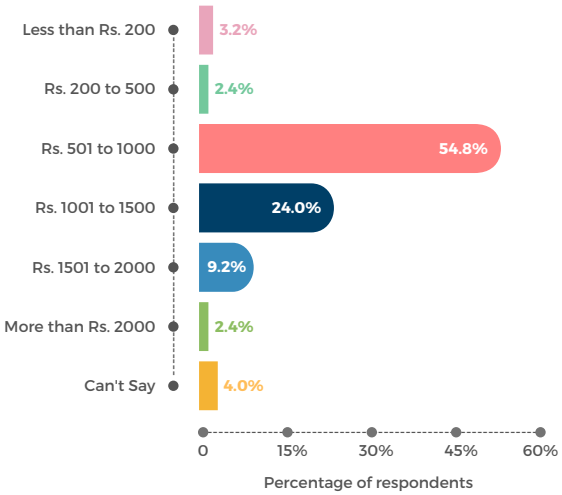


Fig 10 suggests that 60% of respondents faced challenges in getting health services due to long waiting times at the government PHCs, hence the prevalence of preferring private clinics over government hospitals. In a complimentary trend, it is observed in Fig 11 that more than half of the respondents reported spending between Rs. 501 to 1000 in monthly medical expenditure reflecting the financial strain. Factors like distance and cost compound inaccessibility to healthcare options.

IMPROVED ACCESS AND AFFORDABILITY TO HEALTHCARE

FIG 12: HEALTH CENTERS WHERE THE THE RESPONDENTS VISIT MOSTLY FOR DETECTION OF HEALTH CONDITION

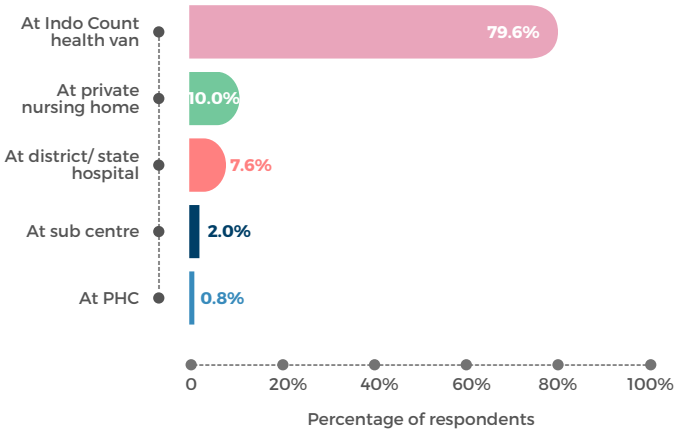
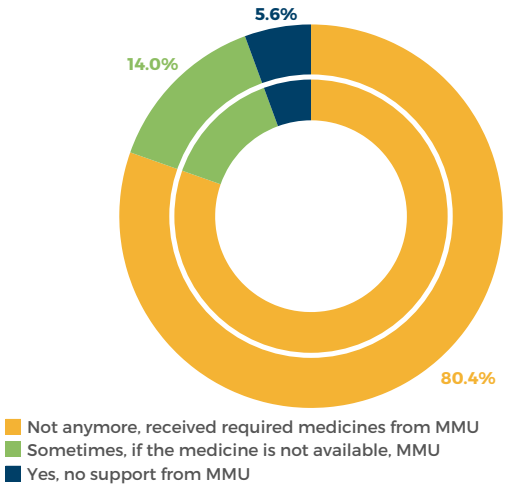


FIG 13: WHETHER NEED TO PURCHASE REGULAR MEDICINE FROM OUTSIDE?

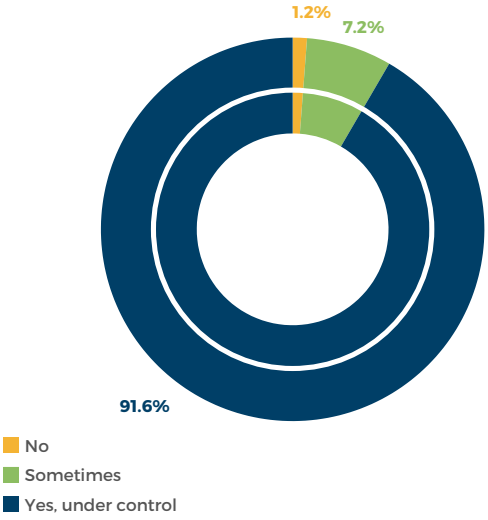


It is observed in Fig 12 that a substantial majority of respondents (79.6%) primarily visit the ICF MMU health van for medical screening highlighting its impactful presence in the community. The frequency of MMU visits is notably high among residents, as evidenced by the testimonials of the MMU healthcare staff.

Additionally, interviews with MMU doctors, nurses, and staff affirm that MMU van regularly assesses various health parameters to orient respondents to disease symptoms and prevention. It is further observed in Fig 13 that more than 80% of respondents reported receiving medicines from the MMU, reducing the need for costly and distant healthcare alternatives.

IMPROVED HEALTH OUTCOMES

FIG 14: WHETHER OBSERVED IMPROVEMENT IN HEALTH CONDITION ESPECIALLY CHRONIC DISEASES LIKE HIGH BP AND DIABETES AFTER RECEIVING CONSULTATION & MEDICINES FROM MHU?



The data above indicates a high level of improvement in health conditions, with 91.6% of respondents reporting better health standards after receiving consultations and medicines from the MMU. This suggests that the intervention has been successful in managing and controlling chronic health issues among the targeted population.

SALINE STAND IN DAY CARE UNIT

"Since the establishment of our MMU, we've observed a decline in waterborne and airborne diseases, demonstrating the effectiveness of our awareness programs. Women and adolescent girls, in particular, have benefited from our initiatives, with a notable reduction in anaemia and menstruation-related issues. Additionally, our focus on hygiene and reproductive health education has empowered individuals to lead healthier lifestyles."

Dr. Amey Kashinath Suplekar, BAMS (MMV)

PROJECT: HEALTH CENTRE AND FACILITY UPGRADATION OF GOVERNMENT HOSPITALS

INCREASED FOOTFALL IN HOSPITALS AFTER INFRASTRUCTURE UPGRADATION

The above key information from one of the stakeholders of the PHCs provides insights into the need for infrastructure upgradation in healthcare delivery, particularly on medical equipment. Field notes suggest the various challenges faced by the rural hospitals in the area, specifically in the cardiology, gynaecology, and HIV/AIDS departments of the hospitals.

The renovation of the HIV/AIDS unit significantly improved testing, counselling, and antiretroviral therapy (ART) services for patients in the area. The unit witnessed a remarkable increase in screenings, confirmed cases, counselling sessions, and ART distribution. The renovation supported by ICF led to an increase in patient footfall, with current numbers ranging from 200 to 250 compared to the previous 150. The information from the field is well evidenced from the interview conducted with medical staff at the PHC.

"Before Indo Count's intervention, our hospital faced numerous challenges; patients had to endure inconveniences, such as travelling to different buildings for tests and examinations."

Rekha Patil, Incharge Nurse, Cardiology Department CPR Hospital (Kolhapur)

"Thanks to Indo Count's generous support, our hospital has undergone a remarkable transformation. Vital medical equipment has significantly enhanced our capacity to deliver quality healthcare services to our community. We've seen a notable increase in the footfall rate at our OPD, particularly in the cardiac department. We've also observed a reduction in waterborne and airborne diseases in our community, thanks to the awareness programs facilitated by Indo Count."

Rekha Patil, Incharge Nurse, Cardiology Department CPR Hospital (Kolhapur)

PROJECT: SUPPORT THROUGH NUTRITION PACKAGE FOR TB PATIENTS

NUTRITIONAL SUPPORT TO TB PATIENTS AND THEIR FAMILIES

FIG 15: FREQUENCY OF CHECKING WEIGHT OF THE PATIENT WHILE HANDING OVER THE NUTRITION KIT

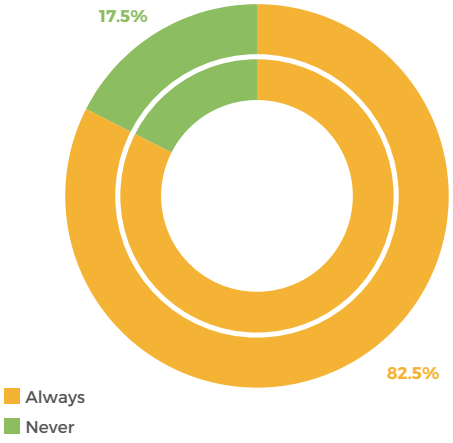
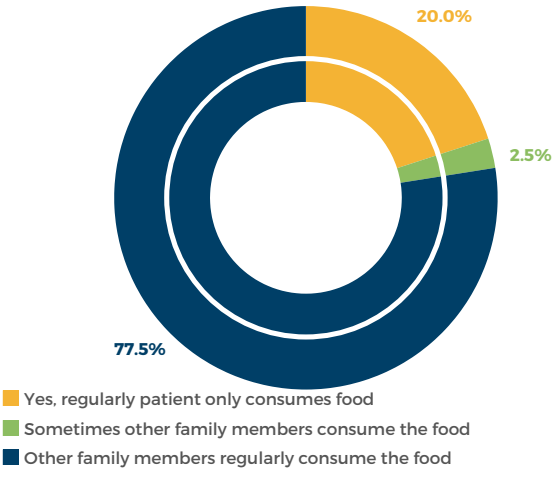


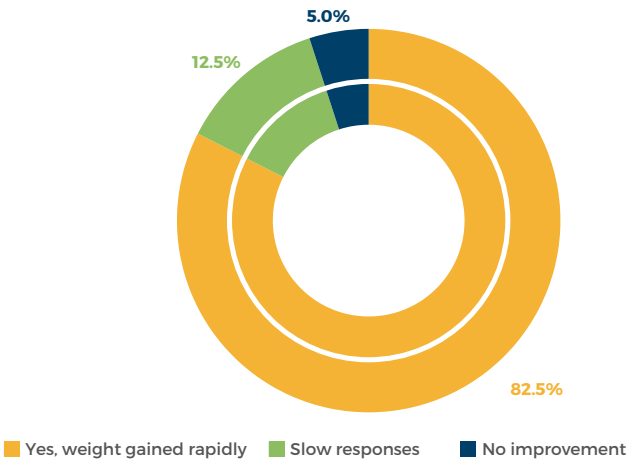
FIG 16: WHETHER ONLY THE PATIENT CONSUME THE FOOD?



The above data sets highlight the efforts of ICF to provide nutritional assistance to TB patients throughout different stages of their treatment journey. In Fig 15, the majority of the respondents (82.5%) reported that their weight was always checked while receiving the nutrition kit. Fig 16 also indicates the prevalence of families of TB patients also getting benefitted. Most of the respondents (77.5%) reported that other family members also consumed the food.

HEALTH OUTCOMES FROM NUTRITIONAL KITS

FIG 17: WHETHER THE PATIENT'S WEIGHT HAS GAINED IN A GRADUAL MANNER?



The data suggests that the majority of respondents (82.5%) reported a gradual weight gain, highlighting the effectiveness of the program in improving their nutritional status.

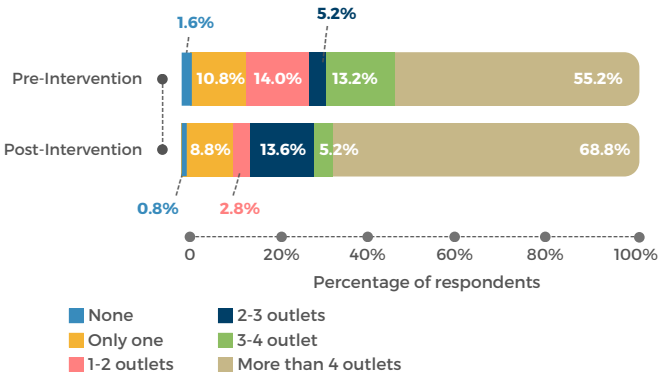
MEDICAL BOX (COLD STORAGE)

COMPONENT: WASH

PROJECT: DRINKING WATER AND SANITATION PROGRAM

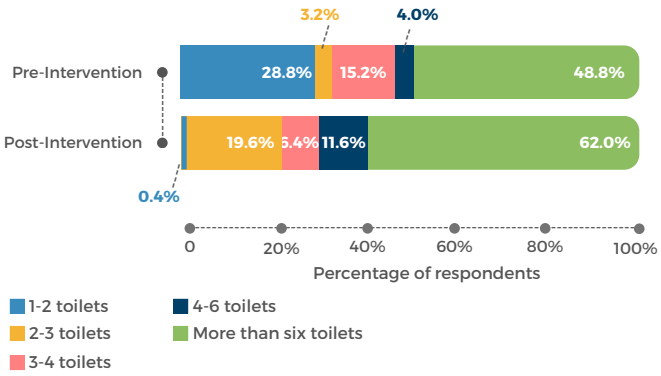
ENHANCED SANITATION INFRASTRUCTURE

FIG 18: CHANGES IN DRINKING WATER FACILITY- PRE & POST INTERVENTION



There is a significant increase in the number of safe drinking water source outlets; Fig 18 highlights that 68.8% of students from the 10 identified schools reported using more than four outlets for clean drinking water. Similarly, more than half of the respondents also reported the availability of 3-4 newly constructed wash basins.

FIG 19: TOTAL NUMBER OF FUNCTIONAL TOILETS- PRE & POST INTERVENTION



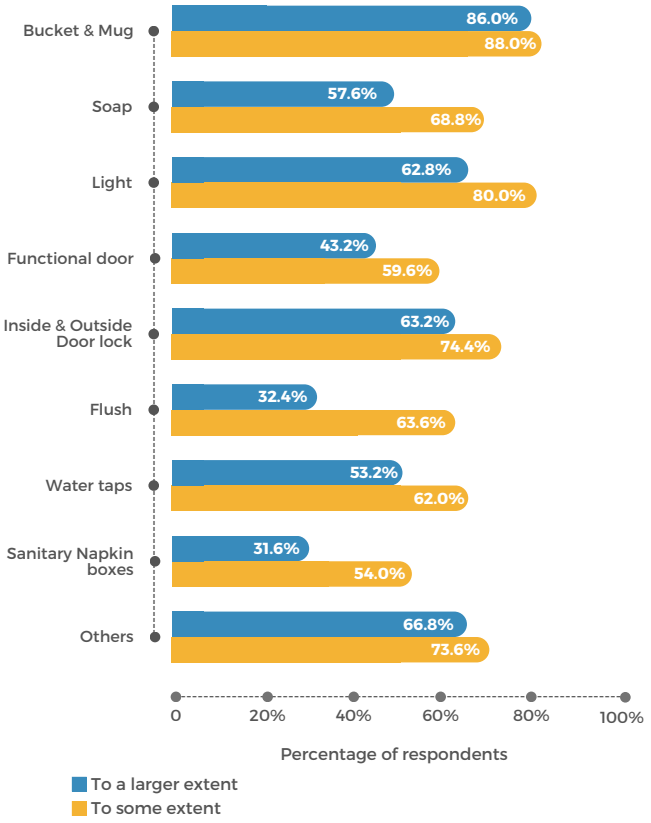
Over 60% of the students reported the availability of more than 6 toilets in their schools, highlighting a slight increase in the number of functional toilets across the 10 schools through the program. Additional field notes provide evidence that the increase in several toilets and drinking facilities has also positively influenced student attendance, academic performance, and overall well-being.

> " The program has significantly enhanced the overall learning environment. The newly constructed RO plant installation has ensured an uninterrupted water supply, promoting student comfort and hygiene."
>
> **- Madhura Makrand Tharval, Deputy Headmaster-Supervisor, Indumati High School**

> "The provision of 16 new toilet blocks and urinals has significantly improved hygiene standards and comfort for our 800 students and 16 staff members. Toilet seats were in short supply earlier, causing girls to wait for a long time, which reduced the time they could spend studying. There is a 20-25% increase in school attendance."
>
> **- Harichandra Ramchandra Satve, Headmaster, Nagojirao Patkar High School**

HEALTH AND HYGIENE AWARENESS

FIG 20: AVAILABILITY OF THE ESSENTIAL FACILITIES- PRE & POST INTERVENTION



Significant improvement is observed in the availability of essential facilities in the school toilets. A comprehensive enhancement in sanitation infrastructure and maintenance has been achieved with the availability of Items like soap, lights, functional doors, and water taps, contributing to a more hygienic environment.

"Students are sensitive about their hygiene after the sessions with Indo Count; thus, they attend school more regularly, get sick less often, and have greater knowledge about menstrual hygiene. We have installed 2 sanitary napkin machines in our school and keep regular checks on their hygiene habits."

Madhura Makrand Tharval, Deputy Headmaster-Supervisor, Indumati High School

FIG 21: HYGIENE PRACTICES ADAPTED AFTER THE WASH PROGRAM IN THE SCHOOL

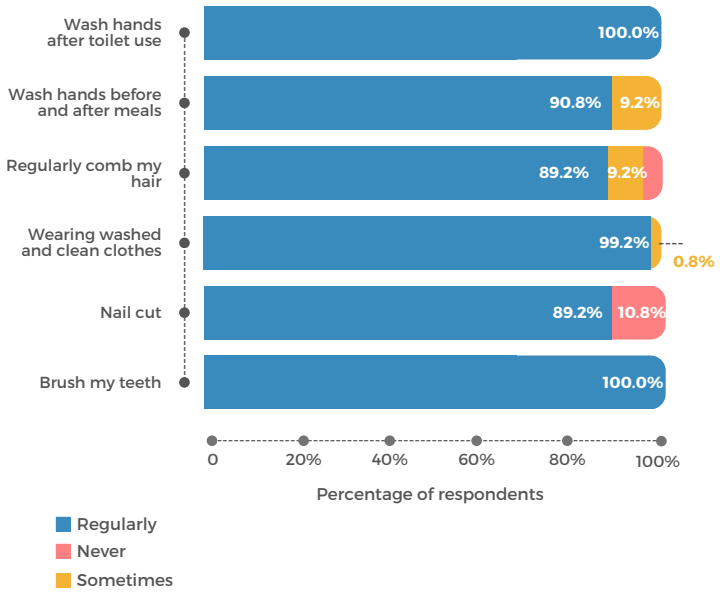
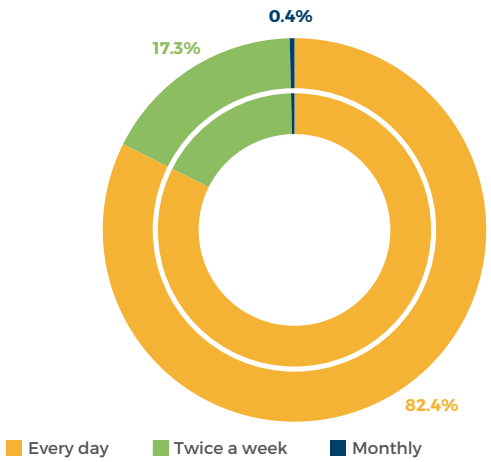


FIG 22: FREQUENCY OF CHECKING HYGIENE PRACTICES IN THE SCHOOL



Overall, Fig 21 suggests a high level of compliance across various aspects of personal hygiene among the students. 100% of respondents reported washing hands after toilet use. This indicates a successful adoption of a crucial hygiene behaviour that can significantly reduce the risk of transmitting infections. The majority of the students reported regularly brushing their teeth (100%), wearing washed and clean clothes, nail cutting and combing their hair. Fig 22 also supports the findings, highlighting that more than 80% of respondents reported daily hygiene checks conducted by their teachers, school staff and principal.

STAKEHOLDER ENGAGEMENT AND SATISFACTION

"I am immensely grateful for the transformative impact of the Indo Count School WASH Program in our community. I've witnessed firsthand the positive changes it has brought to schools. From addressing critical infrastructure needs to promoting hygiene awareness, this program has not only improved attendance and academic performance but also uplifted the overall well-being of students and teachers. The dedication and commitment shown by the team have been truly remarkable, and I look forward to seeing further progress and success in the future."

- Amol Patil, CSR Consultant at Indo Count Foundation

INTERACTCTION WITH CPR HOSPITAL

KEY CHALLENGES AND BARRIERS

INFRASTRUCTURE DEFICIENCIES

Lack of proper infrastructure, such as inadequate sanitation facilities, insufficient water supply, and poor waste management systems in the PHCs posed significant challenges.

EQUIPMENT SHORTAGES

Challenges such as limited space in the operation theatre (OT) and the need for additional equipment were highlighted. Despite the provision of equipment, there was a need for additional ventilators, monitors, blood gas analysers, and syringe pumps to meet the growing patient footfall and enhance patient care.

MEDICATION SHORTAGE

The scarcity of essential medicines limits the quality of care, making it difficult to meet the medical needs of patients effectively.

MAINTENANCE ISSUES

The expired Annual Maintenance Contracts (AMCs) for installations posed challenges in ensuring the proper maintenance and repair of newly constructed buildings and equipment, affecting their functionality.

SHORTAGE OF SANITATION INFRASTRUCTURE

Despite the infrastructure support in schools, shortages of toilets posed a challenge as the student ratio was greater than the availability of toilets. Scope for enhancing dustbin availability, boosting participation in cleaning programs and reinforcing responsible garbage disposal habits in the community.

IMPACT CREATED AT MULTIPLE LEVELS

The impact of the program extended across multiple levels, from individual financial well-being to the National Health Mission, as mentioned below:

INDIVIDUAL

Improved overall well-being and quality of life for individuals affected by communicable diseases and TB.

Individuals experienced better health outcomes and reduced financial burden associated with medical expenses.

HOUSEHOLDS

Families benefiting from the health programs reported improved health outcomes due to regular sustenance of the nutritional packages and free-of-cost health check-ups.

Fostered a more supportive environment for individuals in their families undergoing treatment for communicable diseases and TB.

COLLECTIVE

Through joint efforts to address common health challenges and promote preventive measures, the community has strengthened its unity and cooperation, leading to more effective health interventions and improved health outcomes for all members.

COMMUNITY

Raised awareness about sanitation and hygiene practices within the community, leading to a more appreciative and supportive environment for initiatives aimed at improving WASH facilities.

By promoting healthy behaviours and disease prevention strategies, the programs have contributed to a healthier community overall.

NATIONAL

The health programs align with national objectives for disease prevention, healthcare access, and sanitation improvement, contributing to the broader goals of the National Health Mission.

By providing nutritional support for TB patients and promoting WASH practices, the programs support national efforts to reduce the prevalence of communicable diseases and improve public health outcomes.

05. OECD FRAMEWORK

Relevance

ICF's health and sanitation programs play a crucial role in addressing key priorities outlined in both national and international agendas concerning Tuberculosis (TB), communicable diseases, chronic diseases, and WASH (Water, Sanitation, and Hygiene) practices. ICF's healthcare programs are guided by the health departments in the states of Gujarat and Maharashtra. In addition to TB, the programs address a range of communicable diseases prevalent in the communities it serves. By promoting preventive measures, such as vaccination campaigns, health education, and sanitation improvements, the foundation helps reduce the incidence and transmission of communicable diseases. This aligns with global health initiatives aimed at controlling infectious diseases and preventing outbreaks, ultimately contributing to improved public health outcomes and reduced healthcare burdens.

Coherence

The program aligned with the following Sustainable Development Goals (SDGs):

- SDG 2: Zero Hunger
- SDG 3: Good Health and Well-being
- SDG 4: Quality Education
- SDG 6: Clean Water and Sanitation
- SDG 9: Industry, Innovation, and Infrastructure
- SDG 10: Reduced Inequalities
- SDG 17: Partnerships for the Goals

The program aligned with the following National initiatives:

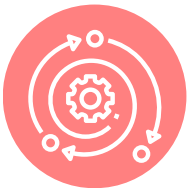
- Swachh Bharat Abhiyan (Clean India Mission)
- National Rural Health Mission (NRHM) / National Health Mission (NHM)
- Ayushman Bharat - Pradhan Mantri Jan Arogya Yojana (PM-JAY)
- National Vector Borne Disease Control Program (NVBDCP)
- Rashtriya Kishor Swasthya Karyakram (RKSK)

Effectiveness

The effectiveness of the program is evidenced by the achievement of its key objectives within the stipulated program period. The program has significantly in improved health outcomes, reducing the burden of medical expenses on the patients and their families and improving community well-being with a thorough WASH program.

Efficiency

The program has demonstrated efficiency through the optimal utilisation of funds by commissioning NGOs, social enterprises, and SHGs to deliver essential healthcare services. Strategic allocation of funds towards healthcare and sanitation infrastructure in rural areas of Kolhapur maximises the enduring long-term impacts of the program. Additionally, the expected outcomes were achieved within the intended timeframe of the program, although there is a need to monitor the expected outcomes in phases.



Impact

The program was high on impact as evidenced by the immediate impacts, including improvements in health infrastructure, increased patient screenings, enhanced health outcomes and treatment opportunities. The long-term impacts are a change in attitude towards preventive sanitary practices, health equity, elimination of TB and community well-being.

Sustainability

By providing health and sanitation infrastructure in rural communities, ICF has presented a sustainable model for reducing health inequity and promoting social inclusion. The beneficiaries are reported to be happy and satisfied with the program as it increased their health outcomes and made them aware of the various health risks. The TB elimination campaign through nutritional packages has been awarded by the local government bodies in Bhilad (Gujarat) and is poised to be scaled up in the entire district.

Relevance

Coherence

Effectiveness

Efficiency

Impact

Sustainability

Index : 5 Points - Very High ; 4 Points - High ; 3 Points - Moderate ; 2 Points - Low ; 1 Point - Very Low

CHAPTER 6
RECOMMENDATIONS

Address increasing patient footfall in PHCs and provide adequate sanitation facilities and additional medical equipment to meet the growing patient footfall and enhance patient care.

Conduct regular assessments of equipment needs in the PHCs and prioritise the procurement of essential equipments.

Implement robust waste management systems to effectively handle waste disposal and maintain cleanliness in healthcare facilities.

Ensure the consistent availability of essential medicines at healthcare facilities. Collaborate with pharmaceutical companies and government agencies to mitigate medication shortages.

Extend AMC or establish alternative arrangements to ensure the continued functionality of buildings and equipment.

Increase the availability of toilets in schools to match the student population.

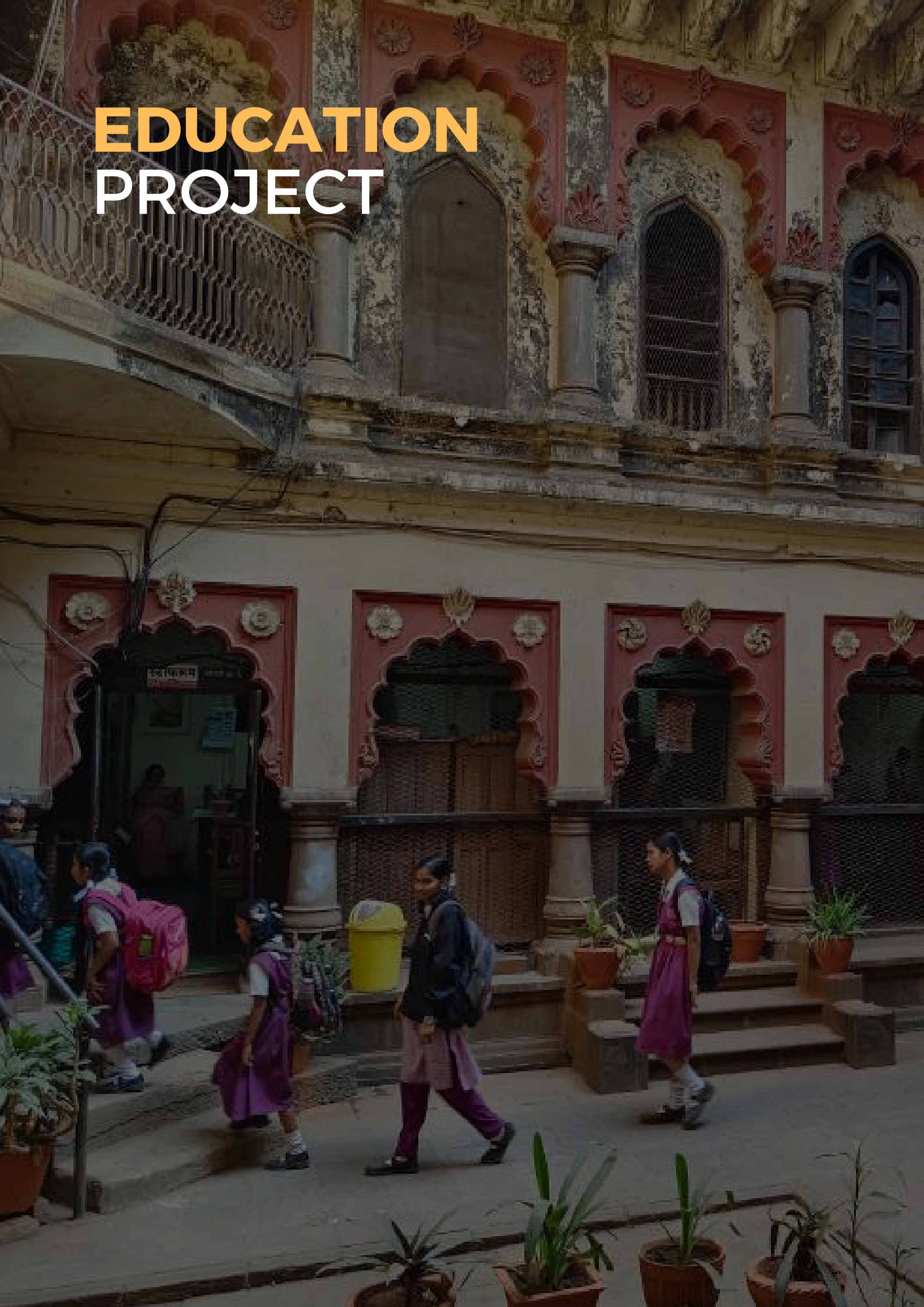
Expand the provision of dustbins in schools and communities to encourage responsible garbage disposal habits.

CHAPTER 7
CONCLUSION

In conclusion, ICF's health and sanitation program has fostered tangible improvements in community well-being. By prioritising access to clean water, sanitation infrastructure enhancement and health education initiatives, the program has not only elevated hygiene standards but has also made significant strides in combating communicable diseases within the communities it serves.

Through targeted interventions, ICF has effectively reduced the prevalence of infectious illnesses, safeguarding the health of vulnerable populations. Moreover, the program's holistic approach extends to addressing broader healthcare challenges exemplified by its robust nutritional support program for Tuberculosis (TB) patients. The provision of essential nutrition kits, coupled with counselling support, highlights the foundation's commitment to addressing the multifaceted needs of TB patients, thereby facilitating their recovery journey.

However, the journey towards improved health outcomes is not without its challenges. Persistent gaps in sanitation infrastructure, irregular participation in cleanliness initiatives and ongoing socio-economic disparities underscore the need for continued targeted intervention. The emergence of new health threats along with existing systemic inequities necessitates a dynamic and adaptive approach to public health programming. Continued support in health education, community engagement and collaborative partnerships will be pivotal in ensuring the program's enduring impact and fostering healthier, more resilient communities for the future. By embracing innovation and prioritising community empowerment, ICF is poised to continue transforming lives and creating lasting social change in the years to come.



EDUCATION PROJECT

CONTENTS

01. ABBREVIATIONS

CSR	Corporate Social Responsibility
NGO	Non-Governmental Organization
SDGs	Sustainable Development Goals
WASH	Water, Sanitation, and Hygiene

CHAPTER 2
INTRODUCTION

DyanProbadhan Blind School Infrastructure Support

BACKGROUND & NEED OF THE PROGRAM

While prioritizing the quality of education in India, there has been a recent push towards integrating technology into schools. E-learning has emerged as a crucial tool for advancing students' educational experiences and preparing them for the future. However, improving education quality cannot happen in isolation; it requires enhancements in school facilities, particularly in WASH (Water, Sanitation, and Hygiene), and overall technological advancement.

Recognizing this necessity, the Indo Count Foundation has launched a program in schools across the Kolhapur region in Maharashtra. This initiative aims to support schools by providing e-learning resources and improving WASH facilities, particularly focusing on toilet blocks.

The program is designed to enhance the learning experience of students by adopting a participatory approach to refine and upgrade school infrastructure, thereby creating an optimal learning environment.

OBJECTIVE OF THE PROGRAM

To enhance WASH facilities in schools and provide e-learning support to foster a conducive and safe learning environment for students.

CHAPTER 3
RESEARCH METHODOLOGY

DyanProbadhan Blind School Infrastructure Support - Girls Studying on New Floor

The Indo Count Foundation commissioned SoulAce to assess the impact of its CSR initiative, the e-learning support program implemented in government schools across seven districts during the period of 2022-23.

OBJECTIVES OF THE STUDY

The primary objectives of the study were to:

To evaluate the immediate impacts of the program implemented and assess the enduring impacts of the program.

To measure the extent to which the program has contributed to the well-being of students.

To provide insights into the strengths and areas for improvement of the program implementation.

DEFINITION OF RESEARCH

Research can be described as a logical and systematic search for new and useful information on a particular subject. Social science research refers to the systematic activity of gaining new understanding by following scientific principles and methods to minimize bias and subjectivity. It is contrary to writing something based on assumptions or speculations. Though information on certain facts can also be gained through common sense and based on general observation and hearsay, those facts will not be considered valid until they have been obtained in a methodical manner, which can stand the test of time. The defining characteristics of scientific research are objectivity, ethical neutrality, reliability, testability and transparency. The identification of the research problem provides the starting point of research, which is then defined and redefined through a proper review of the literature on the problem or deliberations with research experts and knowledgeable others in the subject matter of interest. Each research problem has a multitude of perspectives and dimensions, and research cannot cover all of those in a single study.

MIXED METHOD APPROACH

This evaluation utilized a mixed-methods approach, incorporating both qualitative and quantitative research methods. The qualitative component delved into subjective experiences and perspectives, providing a nuanced understanding of participant views. Meanwhile, quantitative methods facilitated the collection and analysis of numerical data, yielding statistical insights and identifying trends.

The study's research design was descriptive, aiming to present a detailed analysis and exploration of the various facets of the Indo Count Foundation-supported program. Descriptive research is apt for creating an overview, discerning patterns, and grasping the current state of affairs. By integrating both qualitative and quantitative research methodologies within a descriptive framework, the study aimed to deliver a thorough evaluation of the program, elucidating its impact and suggesting avenues for enhancement. This methodological blend ensured a holistic examination of the subject, lending both depth and breadth to the findings and bolstering the study's credibility.

ENSURING TRIANGULATION

To enhance the reliability and validity of its findings, the study implemented various triangulation techniques. Data triangulation was achieved through gathering information from diverse sources, including field notes, interviews with beneficiaries, interactions with community members, and feedback from project volunteers. This extensive data collection facilitated a comprehensive evaluation of the program's impact. Methodological triangulation was also employed, utilizing a variety of research methods such as surveys, interviews, and focus group discussions. This approach allowed for cross-verification of information and helped mitigate potential biases. Through these triangulation strategies, the study ensured a robust and dependable analysis, reinforcing the trustworthiness of its findings.

KEY STAKEHOLDERS

Parents

Students

Teachers

RESEARCH DESIGN

Project Name

Indo Count Foundation School e-learning Support Program

Implementing organization

Wockhardt Foundation

Research Design Used

Descriptive

Sampling Technique

Purposive sampling

Sample Size

266 student beneficiaries, 40 teachers, and 13 parents

Qualitative Methods Used

Semi-structured interviews and focus group discussion with the program implementers and survey with beneficiaries

STUDY TOOLS

Questionnaire for Primary Beneficiaries:
Structured questionnaires were developed, reviewing the project details for each of the focus areas and indicators were pre-defined before conducting the surveys.

Questionnaires and focus group discussion guide for secondary beneficiaries and stakeholders:
A semi-structured questionnaire was developed for each type of sample of this group. Stakeholders were identified across the focus areas. Semi-structured questionnaires and focus group discussions were conducted with school-teachers and parents.

COMMITMENT TO RESEARCH ETHICS

Informed consent

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

Confidentiality and Privacy

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

Voluntary Participation

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

Ethical Treatment

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

DYANPROBADHAN BLIND SCHOOL INFRASTRUCTURE SUPPORT - ROOFTOP WORK

CHAPTER 4
MAJOR KEY FINDINGS

The chapter explores the partnership between the Indo Count Foundation and schools, primarily aimed at enhancing e-learning support and WASH facilities in government schools. This includes initiatives to improve WASH facilities, particularly through the construction of toilet blocks, as well as the provision of e-learning resources in schools, all geared towards creating a conducive learning environment for students. The program has resulted in significant benefits for students' well-being.

Geographical Coverage

The intervention was implemented in six schools located in Kolhapur, Maharashtra.

Outreach and Inclusivity

The primary beneficiaries of the program were students attending schools. Additionally, the program's outreach extended to encompass broader local communities, involving teachers and parents as well.

DEMOGRAPHY OF THE BENEFICIARY POPULATION

CHART 1: GENDER-WISE DISTRIBUTION OF RESPONDENTS

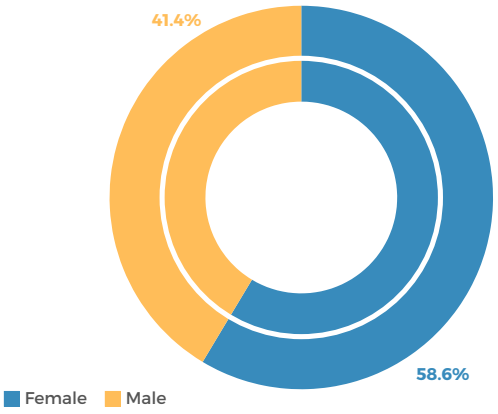
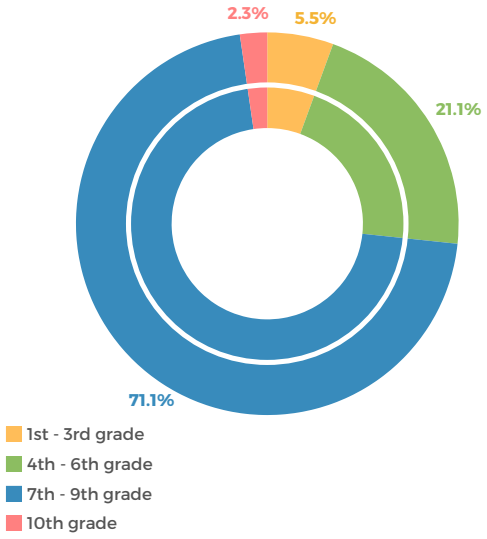


CHART 2: EDUCATIONAL QUALIFICATION



The demographic profile of the beneficiaries reflects a diverse representation across various indicators. In terms of gender distribution, females constitute a majority, comprising 58.6% of the total beneficiaries, while males account for 41.4%. Furthermore, concerning class-wise distribution, over 70% are enrolled in the 7th to 9th standard, with more than 20% in the 4th to 6th grades. This comprehensive analysis highlights the diversity within the beneficiary population in terms of gender and educational level.

PRE-INTERVENTION STATUS

Discussions with stakeholders, including teachers, parents have unveiled the pre-intervention status of the program:

CHART 3: SUPPORT FOR SCHOOL ASSIGNMENTS AND TUITION

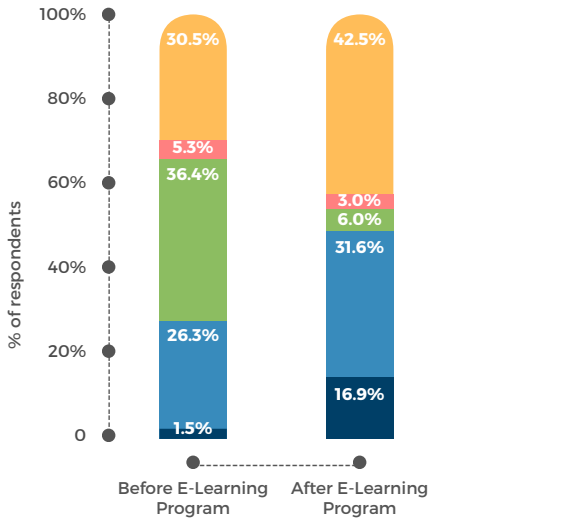
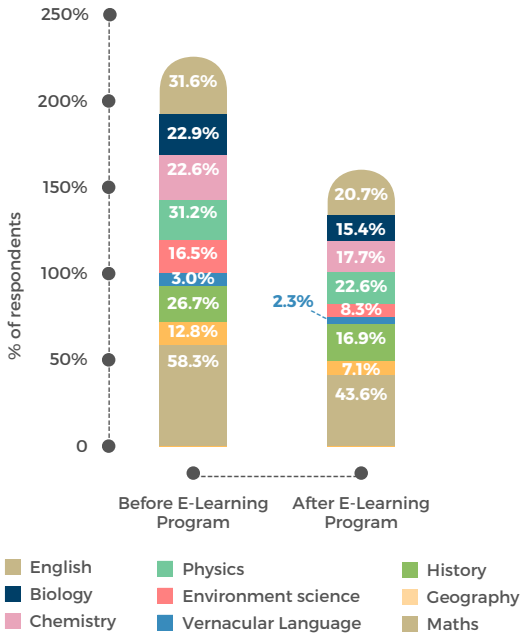


CHART 4: SUBJECTS THAT CAUSED THE MOST FEAR AND ANXIETY



Student attendance in classes was low, leading to lower educational achievement among students.

Chart 3 illustrates a notable improvement in students' ability to complete assignments independently following the intervention. Before the intervention, only 1.5% of students could do so, whereas post-intervention, this figure increased to approximately 17%.

Similarly, reliance on tuition support or assistance from others decreased significantly from 36.5% before the intervention to just 6% post-intervention.

Chart 4 outlines the subjects that caused fear and anxiety among students. Mathematics emerged as the primary subject of fear, followed by English and physics. Prior to the intervention, 58.3% of students expressed fear about Maths, which decreased to 43.6% post-intervention. Additionally, a considerable number of students reported experiencing fear of subjects such as biology and chemistry.

E-LEARNING PROJECTOR IN SCHOOL

KEY PROGRAM INPUTS AND ACTIVITIES

The program aimed to improve the technological infrastructure in schools by providing E-learning software and hardware alongside enhancing WASH (Water, Sanitation, and Hygiene) facilities to foster a conducive and safe learning environment. The overarching goal was to enhance student's overall educational experience and address infrastructure deficiencies contributing to increased dropout rates, thereby promoting regular attendance and retention.

PROVISION OF E-LEARNING HARDWARE AND SOFTWARE IN SCHOOLS

HARDWARE AND SOFTWARE PROVISION

The program facilitated the provision of E-learning hardware and software in schools, ensuring students have access to a diverse array of educational materials and resources. This includes computers, tablets, interactive whiteboards, educational software, and internet connectivity.

TEACHER TRAINING

Indo Count Foundation supported teachers in effectively utilizing E-learning software and hardware. Training sessions were conducted to familiarize teachers with these tools and empower them to incorporate innovative teaching methodologies into their lessons. This ensured that teachers could maximize the benefits of E-learning resources to enhance the learning experience for students.

PROVISION OF WASH FACILITY IN SCHOOL

RENOVATION AND CONSTRUCTION OF WASH FACILITY

The program involved renovating existing and constructing new WASH facilities, particularly toilet blocks, within schools. By providing clean and safe sanitation facilities, the program aimed to ensure the health and well-being of students while creating an environment conducive to learning.

KEY IMPACTS

ENHANCED ACADEMIC PERFORMANCE

Post-intervention, 97% of students noted improvements in their reading skills, ranging from some improvement to significant enhancement. This underscores the positive impact of the intervention on academic performance and learning outcomes.

Students expressed that the e-learning program facilitated their understanding of complex passages, as demonstrated in Chart 6. The provision of e-learning not only improved comprehension but also contributed to better attendance, thereby promoting students' educational engagement and overall academic well-being.

CHART 5: LEVEL OF IMPROVEMENT NOTICED IN THE READING SKILLS AMONG STUDENTS ACROSS ALL GRADES

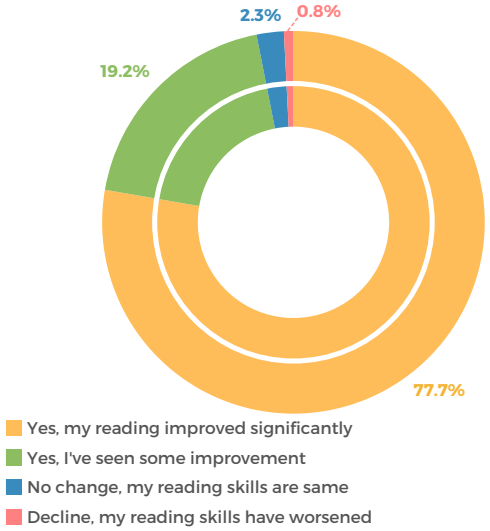
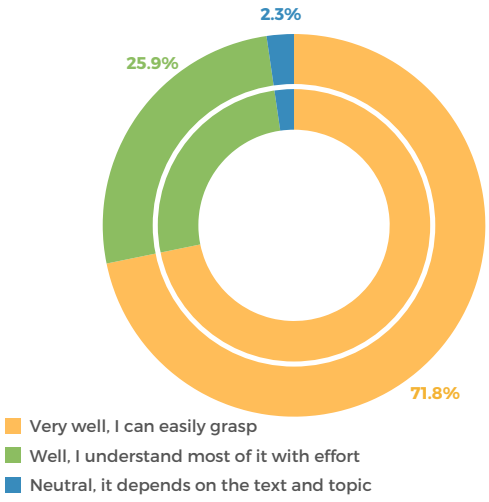


CHART 6: EXTENT TO WHICH UNDERSTAND COMPLEX PASSAGES AFTER USING THE E- LEARNING PROGRAM



IMPROVED EDUCATIONAL ENGAGEMENT

Students exhibited heightened confidence in tackling complex math problems following their engagement with the e-learning program. This improved educational engagement indicates a positive impact on academic performance and learning outcomes. Moreover, the program's influence extends to enhancing students' emotional well-being, contributing to a holistic improvement in their overall wellness.

HELPERS OF HANDICAPS VOCATIONAL TRAINING

CHART 7: LEVEL OF CONFIDENCE IN SOLVING COMPLEX MATHS PROBLEMS

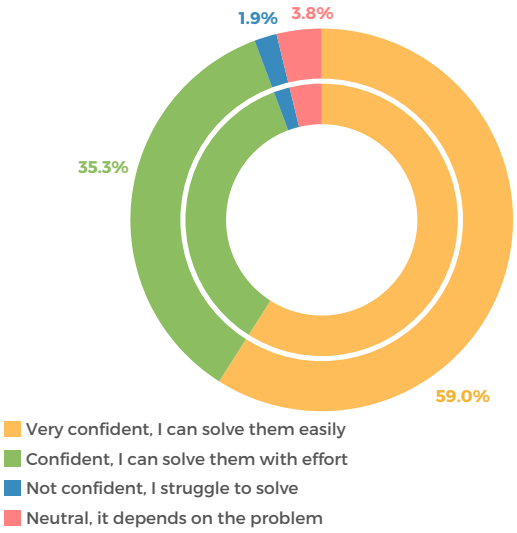
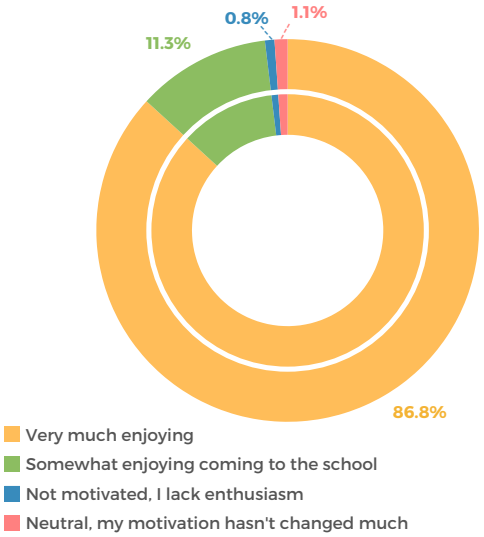


CHART 8: WHETHER STUDENTS ENJOY COMING TO SCHOOL REGULARLY



IMPROVED LEARNING ENVIRONMENT AT SCHOOL

Implementation of the e-learning program has significantly enhanced the learning environment, with over 98.1% of students reported enjoying attending the school. Moreover, students have shown heightened motivation to complete e-learning activities and assignments, leading to improved attendance rates. This positive trend fosters a conducive learning environment, ultimately contributing to academic success and student well-being.

IMPROVED BEHAVIOUR OF STUDENTS

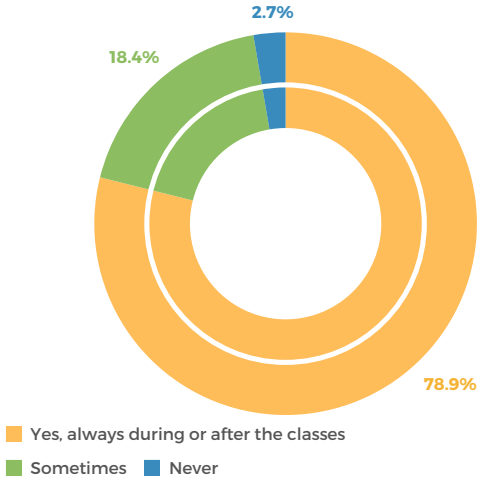
The intervention resulted in significant improvements in student behaviour, including heightened discipline and decreased instances of absenteeism. These changes reflect a more positive and respectful school environment, fostering a conducive atmosphere for learning.

ENHANCED INDIVIDUAL WELL-BEING

Students reported improved overall well-being, with 78.9% expressing the ability to discuss doubts, leading to increased confidence and a more positive attitude. This indicates that the program contributed to the development of students' mental and emotional resilience, promoting greater self-esteem and a healthier mindset.

INTERACTION WITH BENEFICIARIES

CHART 9: LEVEL OF SCOPE TO INTERACT IN THE E-LEARNING CLASSES REGARDING ANY DOUBTS



IMPROVED HEALTH OF THE STUDENTS

The intervention resulted in significant improvements in student health and hygiene practices, facilitated by the provision of toilet blocks in schools. These changes have contributed to fostering a more positive and respectful school environment, promoting better health outcomes among students.

"Indo Count's e-learning project not only improved my child's academic performance but also increased their interest in education. Thank you for your support."

Mrs. Priyanka Sachin Lohar, Parents, Nagoji Patkar High School, Kolhapur

NEW CONSTRUCTED TOILET BLOCK IN SCHOOL

HELPERS OF HANDICAPS VOCATIONAL TRAINING

"The provision of well-equipped toilet blocks has made a noticeable difference in our school. Not only have the waiting times for students been reduced, but their health and hygiene standards have also significantly improved. This has relieved the strain on our existing facilities. We've observed a clear 15-20% improvement in students' academic performance, and I believe this positive change is largely due to the support from the Indo Count Foundation. They've acted as a catalyst for this upward trajectory by providing holistic support".

Teacher's FGD, Indumati High School, Kolhapur

KEY STAKEHOLDER SATISFACTION

The research team extensively interacted with key stakeholders through key informant interviews and focus group discussions. The qualitative findings from these interactions are outlined below:

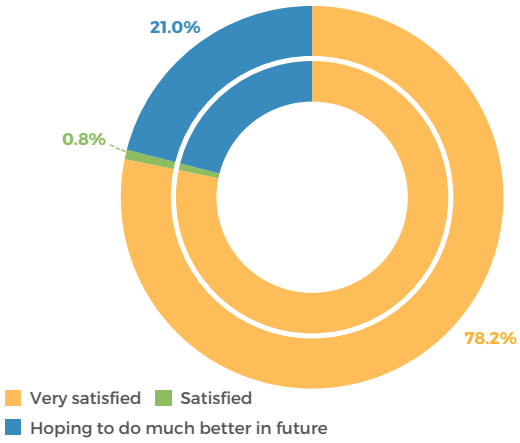
Teachers reported a significant improvement in students' engagement and interest, particularly in demanding subjects such as science and mathematics. They attributed this enhancement to the immersive experience provided by the large screen projector.

Teachers expressed satisfaction with the students' increased grasp of academic concepts, leading to improvements in academic performance. They also noted a notable surge in new admissions, indicating the school's enhanced appeal due to its modernized learning infrastructure.

Parents expressed satisfaction with the improvements in the school's WASH facilities. They highlighted the significant improvement in children's punctuality and attentiveness, leading to enhanced academic performance.

The majority of students (79%) reported positive effects of the e-learning program on their academic performance and expressed satisfaction with their current progress. Additionally, 21% of students expressed optimism about performing better in the future.

CHART 10: LEVEL OF SATISFACTION OF STUDENTS WITH CURRENT ACADEMIC PROGRESS



"I've seen big changes because of the Indo Count project in our school. The number of students increased by 5-10% because of the E-Learning support from Indo Count. Before this, usually only 40-50% of students would come to school, but now, with the e-learning program, it's gone up to 60-70%. Indo Count's help has been really important for our school and our kids."

Mr Harichandra Ramchandra Satve, Head Master-Supervisor, Nagojirao Patkar High School, Kolhapur

"E-learning equipment and software help to explain complex subjects to students. Previously, students found it difficult to understand and take interest in subjects like Science and Maths. However, with the help of visuals, they have become more engaged and interested in learning. I am grateful to Indo Count for their support in providing E-learning resources."

Mr. Kumar Ramchandra Kurukale, Sr. Teacher, Nagoji Patkar High School, Kolhapur

KEY CHALLENGES & BARRIERS

The limited availability of projectors in the E-Learning classroom leads to students having to take turns, causing delays.

Approximately half of the students reported technical errors causing the system to malfunction, as shown in Chart 11.

Power cuts during classes have been a significant challenge reported by students.

Weak internet connection poses another obstacle to smooth e-learning sessions.

IMPACT CREATED AT MULTIPLE LEVELS

INDIVIDUAL

Improved concentration and punctuality of students, leading to better educational attainment.

Increased desire and interest to attend school among students, resulting in higher levels of engagement and participation in their education.

Improved student learning outcomes.

Reduced the likelihood of sickness among students and promoting overall well-being.

Increased confidence among students to ask queries to teachers.

HOUSEHOLDS

Enhanced well-being of students contributes to overall family well-being.

SCHOOL

Establishment of essential WASH infrastructure facilities at the school level.

Provision of e-learning resources coupled with traditional teaching leading to students' engagement in learning and promoting students' well-being and enhancing their ability to learn.

Reduction in instances of dropouts, fostering a conducive school environment.

Increased enrolment and attendance of students in school.

STATE

Contribution to state efforts in schooling and students' well-being through education promotion initiatives.

SUSTAINABILITY

The program has several elements of sustainability embedded in its design:

COMMUNITY INVOLVEMENT IN E-LEARNING SCHOOL PROGRAM

Community involvement in the school e-learning program fosters a sense of ownership and responsibility among stakeholders, including parents, teachers, students and implementing partners. This active engagement ensures that the program is not solely reliant on external resources or personnel but rather on the stakeholders' support, willingness, and ongoing engagement.

05. OECD FRAMEWORK

Relevance

The project was highly relevant as it aimed WASH to create a safe and conducive learning environment for students. By providing e-learning software and hardware in schools, alongside the construction of toilets, the intervention addressed fundamental infrastructure challenges while also making education more engaging. Furthermore, the selected schools from the Kolhapur region primarily served socioeconomically disadvantaged areas, thus addressing equity concerns. WASH

Coherence

The intervention is well aligned with SDG goals:

- SDG 3: Good health and well-being
- SDG 4: Quality education
- SDG 6: Clean water and sanitation

It also aligns with Government flagship programs such as Digital India and Swachh Bharat.

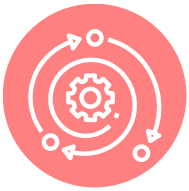
Effectiveness

Students, as the primary recipients of the intervention, have reported substantial advantages, including heightened punctuality and enthusiasm for attending school, along with enhanced academic performance during classes, all credited to the school e-learning program. The program's effectiveness is underscored by the positive outcomes observed across various metrics, including improved well-being and decreased dropout rates. The provision of toilets has notably elevated dignity and well-being, resulting in enhanced attendance rates. Furthermore, by prioritizing the involvement of parents and teachers, the program has cultivated a supportive environment conducive to the comprehensive development of its beneficiaries.

Efficiency

The project has effectively met its objectives by enhancing school WASH infrastructure and improving educational attainment among students, thereby enhancing their overall well-being. Its success is evidenced by the efficient allocation of resources to achieve the desired outcomes.

Index : 5 Points - Very High ; 4 Points - High ; 3 Points - Moderate ; 2 Points - Low ; 1 Point - Very Low



Impact

The program has made a substantial positive impact across multiple levels, including individual, household, school, and community. Students participating in the program have experienced improvements in their academic well-being. By providing WASH infrastructure and e-learning facilities, students have reported enhanced concentration and academic performance in class, leading to improved educational outcomes and future opportunities. Additionally, by improving student well-being, the program has fostered positive relationships within families, created a supportive school environment, and contributed to the overall health and resilience of communities.

Sustainability

The intervention has laid a strong foundation for sustainability by building resilient infrastructure and actively engaging stakeholders. Through the involvement of teachers, parents, and students, the program has instilled a sense of ownership and responsibility among stakeholders. This active participation has empowered teachers and students to take control of the initiative, ensuring its continuity and long-term success.

Relevance

Coherence

Effectiveness

Efficiency

Impact

Sustainability

CHAPTER 6
RECOMMENDATIONS

SCALE UP

The intervention has demonstrated success in enhancing academic performance, school environment, and well-being among students. To expand its impact, the intervention model can be scaled up to reach more schools and communities. This will require increased networking with stakeholders, including government and non-profit organizations, to broaden the program's reach and effectiveness.

CAPACITY BUILDING

It is essential to provide training and capacity-building sessions for teachers and school staff to effectively utilize e-learning resources and maintain hygienic facilities. This ensures the sustainability of the initiatives and maximizes their long-term impact.

MAINTENANCE OF WASH FACILITIES

Regular maintenance and upkeep of sanitation infrastructure are crucial to sustaining the positive impact on students' health and hygiene. Implementing a structured maintenance plan will help ensure the continued functionality of WASH facilities in schools. Furthermore, in addition to constructing toilet blocks, it is imperative to install overhead water tanks and pipeline connections in the toilets to ensure a continuous supply of running water.

ENHANCE CREATIVITY IN E-LEARNING CONTENT

Based on student feedback, there is a clear demand for content that is easier to grasp. To meet this need, it's essential to introduce greater interactivity through games, engaging activities, videos, and images. This approach will not only simplify comprehension but also make the learning process more enjoyable and effective.

CHAPTER 7
CONCLUSION

The collaboration between Indo Count and Wockhardt Foundation aimed to enhance the academic performance and educational achievement of students by implementing e-learning facilities and constructing toilet blocks in selected schools in Kolhapur district, Maharashtra. By introducing a school e-learning program, the initiative aimed to establish a conducive learning environment for students by improving various aspects of WASH infrastructure and e-learning facilities in schools.

Key activities of the intervention focused on providing e-learning hardware and software to schools, along with the construction of toilet blocks under the WASH in School initiative. These efforts were geared towards creating a supportive environment for students to thrive in their learning journey. The intervention's impact was significant, evident in the observed improvements in student academic performance, attendance rates, and overall well-being. These positive outcomes underscore the effectiveness of community-driven approaches in addressing both the immediate infrastructure needs of students and fostering a supportive environment for their long-term well-being.

ENVIRONMENT PROGRAM

CONTENTS

01. ABBREVIATIONS

CSR	Corporate Social Responsibility
MIDC	Maharashtra Industrial Development Corporation
NGO	Non-Governmental Organization
SDG	Sustainable Development Goals

CHAPTER 2
INTRODUCTION

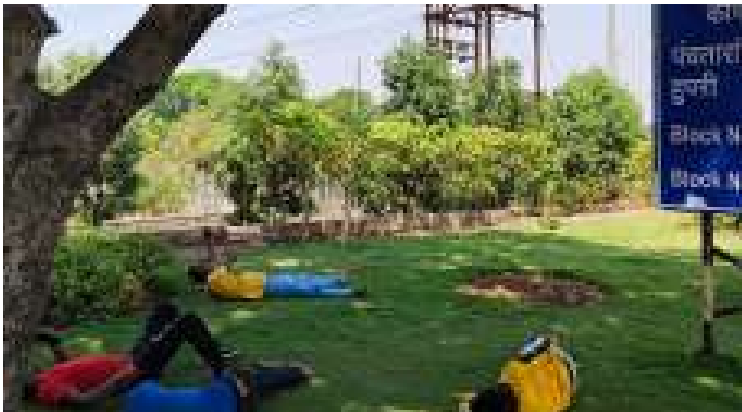
Factory Area Plantation Kagal, MIDC

BACKGROUND & NEED OF THE PROGRAM

The areas surrounding the Kagal MIDC factory have faced a notable surge in pollution levels, notably in carbon emissions, which present significant risks to both local communities and the global climate. To address this urgent challenge, the Indo Count Foundation has launched an intervention to establish a comprehensive garden using the Miyawaki method near the Kagal MIDC factory location in Maharashtra. The primary goal of this initiative is to improve the environmental conditions in the area. Through this program, Indo Count aims to reduce pollution and boost biodiversity, ultimately fostering the overall health and resilience of the environment.

OBJECTIVE OF THE PROGRAM

To enhance the environmental quality in the vicinity of the factory by creating a comprehensive garden using the Miyawaki method.



GREEN LAWN IN KAGAL MIDC

CHAPTER 3
RESEARCH METHODOLOGY

Indocount Industries, Kolhapur

The Indo Count Foundation commissioned SoulAce to assess the impact of its CSR initiative, the environment program implemented in the nearby area of Kagal MIDC area during 2022-23.

OBJECTIVES OF THE STUDY

The primary objectives of the study were to:

To evaluate the immediate impacts of the program implemented and assess the enduring impacts of the program.

To measure the extent to which the program has contributed to the well-being of the community.

To provide insights into the strengths and areas for improvement of the program implementation.

DEFINITION OF RESEARCH

Research can be described as a logical and systematic search for new and useful information on a particular subject. Social science research refers to the systematic activity of gaining new understanding by following scientific principles and methods to minimize bias and subjectivity. It is contrary to writing something based on assumptions or speculations. Though information on certain facts can also be gained through common sense and based on general observation and hearsay, those facts will not be considered valid until they have been obtained in a methodical manner, which can stand the test of time. The defining characteristics of scientific research are objectivity, ethical neutrality, reliability, testability, and transparency. The identification of the research problem provides the starting point of research, which is then defined and redefined through a proper review of the literature on the problem or deliberations with research experts and knowledgeable others in the subject matter of interest. Each research problem has a multitude of perspectives and dimensions, and research cannot cover all of those in a single study.

QUALITATIVE METHOD APPROACH

This evaluation utilized a qualitative methods approach, incorporating qualitative research methods. The qualitative component delved into subjective experiences and perspectives, providing a nuanced understanding of key stakeholders' views. Qualitative research can only unravel enriched and hidden information that may not be evident on the face of it. The qualitative approach is distinguished by deeper probing and flexibility, and it can yield massive amounts of data that were not anticipated when the research was initiated. The qualitative component delved into subjective experiences and perspectives, providing a nuanced understanding of participant views.

The study's research design was descriptive, aiming to present a detailed analysis and exploration of the various facets of the Indo-Count-supported program. Descriptive research is apt for creating an overview, discerning patterns, and grasping the current state of affairs. The study aimed to deliver a thorough evaluation of the program, elucidating its impact, and suggesting avenues for enhancement.

RESEARCH DESIGN

Name of the Project

Indo Count Foundation Environment Program

Implementing organization

Indo Count foundation

Research Design Used

Descriptive

Sampling Technique

Purposive sampling

Sample Size

20

Qualitative Methods Used

Semi-structured interviews with the program implementers.

KEY STAKEHOLDERS

Program Implementors

STUDY TOOLS

Questionnaires for stakeholders – A semi-structured questionnaire was developed for stakeholders. Semi-structured questionnaires were conducted with stakeholders.

COMMITMENT TO RESEARCH ETHICS

Informed consent

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

Confidentiality and Privacy

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

Voluntary Participation

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

Ethical Treatment

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

NESTING ON TREE

CHAPTER 4
MAJOR KEY FINDINGS

The chapter focuses on the collaboration between the Indo Count Foundation and MIDC to enhance green cover and mitigate pollution in the factory vicinity. This involved planting saplings using the Miyawaki method to improve biodiversity, reduce carbon emissions, and promote environmental health and resilience. The program has positively impacted the community's well-being.

Geographical Coverage

The intervention was implemented in the factory vicinity of the Kagal MIDC area in Maharashtra.

Outreach and Inclusivity

The program primarily benefited residents living near the factory, with outreach efforts extending to broader local communities.

DEMOGRAPHY OF THE BENEFICIARY POPULATION

Interviews with key stakeholders, including officers from the implementing organization, indicated that the majority of those involved in the project are local individuals employed at the factory and their families residing in the nearby region, as well as nursery contractors from the community.

PRE-INTERVENTION STATUS

Discussions with stakeholders have unveiled the pre-intervention status of the program:

The land was observed to be a barren wasteland, heavily polluted with active pollutants.

High levels of carbon emissions and pollution in the area were identified, leading to health hazards for the community.

INTERACTION WITH PLANTATION STAFF

KEY PROGRAM INPUTS AND ACTIVITIES

The program's primary objective was to enhance the environmental quality of the factory's vicinity through the implementation of the Miyawaki gardening technique. By doing so, the program aimed to mitigate pollution levels and combat the increasing carbon emissions that posed health risks to the surrounding community. Ultimately, the goal was to create a healthier and safer environment for the residents living nearby.

SR.NO.	ACTIVITY	UNIT OF MEASUREMENT	TARGET
1 Tree plantation using the Miyawaki method			
1.1	Site Selection	No. of sites	1
1.2	Species selection	Percentage of indigenous species	90%
1.3	Planting saplings	No. of saplings	13,500 plants in 5 acres of land
1.4	Plantation maintenance	No. of caretakers	4

1. SITE PREPARATION

Soil analysis was performed in the plantation area, which was previously barren land containing high levels of pollutants. Before planting, the site was cleared of pollutants. To improve soil fertility, a blend of vermicompost and other traditional fertilizers was added after thorough soil testing.

2. SPECIES SELECTION

Plant species well-suited to the climate and soil conditions were meticulously selected. The saplings consist of 90% indigenous species known for their ability to absorb carbon dioxide and release more oxygen.

3. PLANTING SAPLINGS

Utilizing top-grade planting materials and equipment, the plantation process adhered to meticulous planting techniques. This included precision cutting, trimming, and thorough soil preparation to ensure the saplings were provided with ideal growing conditions for optimal development.

4. PLANTATION MAINTENANCE

A combination of rainwater and corporation water was utilized to irrigate the plants, supported by a meticulously designed timber water system to ensure consistent hydration. Caretakers were assigned to closely monitor the progress of the planted trees, with regular monitoring visits conducted by the Senior CSR Consultant to ensure proper growth and development.

KEY IMPACTS

IMPROVED ENVIRONMENT

The intervention has notably increased the greenery in the vicinity of the factory, resulting in lower temperatures and decreased carbon emissions. This indicates a positive impact on the environment by mitigating urban heat island effects and contributing to overall environmental betterment.

INCREASE IN BIODIVERSITY

Implementation of the Miyawaki gardening method has resulted in an increase in bird species, snakes, and other wildlife, enhancing biodiversity within the forest. This contributes to the forest's resilience and reduces maintenance costs, creating a thriving habitat for diverse flora and fauna.

OPTIMUM UTILIZATION OF BARREN LAND

Previously barren land has been effectively utilized through Miyawaki gardening, resulting in the beautification of the area. This demonstrates a sustainable approach to land use, where previously unused spaces are transformed into thriving ecosystems, benefiting both the environment and the community aesthetically.

IMPROVED HEALTH AND WELL-BEING

The presence of greenery and the resultant decrease in temperature have contributed to the improved well-being of the nearby community. Access to green spaces in the MIDC areas promotes mental and physical health, providing residents with a rejuvenating environment to enjoy and benefit from.

"The implementation of the Miyawaki method in gardening has proven highly beneficial for the community surrounding the factory area. This has resulted in a decrease in carbon emissions and lowered temperatures in the vicinity. Additionally, there has been a noticeable increase in biodiversity within the garden. Overall, the environmental conditions in this area have significantly improved, leading to an enhancement in the well-being of the community."

- Amol Patil, Sr. CSR consultant, Indo Count Foundation

FLORA IN THE MIYAWAKI REGION

GARDEN AREA

KEY STAKEHOLDER SATISFACTION

The research team extensively interacted with key stakeholders through key informant interviews. The qualitative findings from these interactions are outlined below:

Stakeholder interactions revealed that following the tree plantation, the temperature of the area has decreased, leading to better health outcomes for the nearby residents.

Stakeholder feedback emphasized their satisfaction with the establishment of the garden, as it has resulted in increased biodiversity and beautification of the area. This, in turn, has fostered more communal bonding activities within the community.

MIYAWAKI PLANTATION

TREE PLANTED AT MIYAWAKI GARDEN

CARBON SEQUESTRATION AT KOLHAPUR PLANTATION SITE

Weight = 0.25 X (D) 2 X H

D = Diameter
H = Height

Weight = 0.25X (0.5)2 X 7
Weight= 0.25 X0.25 X7
Weight =0.4375
The root system weighs about 20% as much as the above-ground weight of the tree. Therefore, to determine the total green weight of the tree, multiply the above-ground weight of the tree by 120.

Total Biomass (TB) = 0.4375 x120
= 52.5

On average, a tree consists of 72.5% dry matter and 27.5% moisture content. To calculate the tree's dry weight, we could multiply the total weight of the tree by 72.5%.

Total Dry Weight (TDW) = TB × 0.725
= 52.5 X 0.725
= 38

Carbon occupies 50% of the total dry weight. Therefore,
Total Carbon (TC) = TDW × 0.5
= 38 X 0.5
=19

With the value of total carbon, we can calculate the value of CO2 equivalent sequestered on a tree. CO2 has one molecule of Carbon and two molecules of Oxygen. The atomic weight of Carbon is 12u, and the atomic weight of Oxygen is 16u. The weight of CO2 in trees is determined by the ratio of CO2 to C is 44/12 = 3.67(Molecular Weight of Co2: 44).
Therefore, to determine the weight of carbon dioxide sequestered in the tree, multiply the weight of carbon in the tree by 3.67.

CO2 weight for 1 tree = TC × 3.67
= 19 X 3.67
= 69.73 lbs C02 sequestered
= 0.0316Tonnes C02 sequestered

Total planted : 15000
Toatl died and replaced = 400
CO2 weight for 1 tree x15000 = 0.0316 Tonnesx 15000

= 474 Tonnes C02 sequestered

CARBON SEQUESTRATION AT VAPI PLANTATION SITE

Weight=0.25 X (D)2 X H

D = Diameter
H = Height

Weight = 0.25X (0.17)2 X 15
Weight= 0.25 X0.22 X15
Weight =0.825
The root system weighs about 20% as much as the above-ground weight of the tree. Therefore, to determine the total green weight of the tree, multiply the above-ground weight of the tree by 120.

Total Biomass (TB) = 0.825x120
= 99

On average, a tree consists of 72.5% dry matter and 27.5% moisture content. To calculate the tree's dry weight, we could multiply the total weight of the tree by 72.5%.

Total Dry Weight (TDW) = TB × 0.725
= 99 x 0.725
= 71.77

Carbon occupies 50% of the total dry weight. Therefore,
Total Carbon (TC) = TDW × 0.5
= 71.77 x 0.5
= 35.38

With the value of total carbon, we can calculate the value of CO2 equivalent sequestered on a tree. CO2 has one molecule of Carbon and two molecules of Oxygen. The atomic weight of Carbon is 12u, and the atomic weight of Oxygen is 16u. The weight of CO2 in trees is determined by the ratio of CO2 to C is 44/12 = 3.67(Molecular Weight of Co2: 44).
Therefore, to determine the weight of carbon dioxide sequestered in the tree, multiply the weight of carbon in the tree by 3.67.

CO2 weight = 35.38 × 3.67
= 129 .84 lbs C02 sequestered
= 0.058 Tonnes C02 sequestered

KEY CHALLENGES & BARRIERS

Managing the cleaning of the space and ensuring caretakers regularly care for the plants can pose challenges in this context.

IMPACT CREATED AT MULTIPLE LEVELS

INDIVIDUAL

Decrease in temperature has led to better health outcomes for individuals.

COMMUNITY

The augmentation of diverse flora and fauna has significantly enhanced the beautification and aesthetic appeal of the area.

Reduction in carbon emissions and temperature has improved the overall health of the community.

The presence of greenery and lower temperatures have contributed to the improved well-being of community members.

NATIONAL

Contribution to national climate change goals by promoting sustainable utilization of terrestrial systems.

SUSTAINABILITY

The program has several elements of sustainability embedded in its design:

BUILDING A FULLY FLEDGE GARDEN

The program focused on creating a fully-fledged garden using the Miyawaki method, promoting increased biodiversity and reduced pollution in the nearby region.

INDIGENOUS SPECIES SELECTION

The Miyawaki garden prioritized the use of native plant species, enhancing the ecosystem's self-sustainability. These species are well-adapted to local climate, soil conditions, and biodiversity, requiring less maintenance and resources over time.

05. OECD FRAMEWORK

Relevance

Situated closer to the Kagal MIDC factory area, the major concern was the loss of greenery and significant pollution levels. Additionally, the carbon levels in the region were alarming. The intervention of gardening using the Miyawaki method in this region sought to establish a complete garden and mitigate pollution. The tree plantation program near the factory region not only sought to improve the environment but also aimed to enhance the health outcomes of the community. Thus, the program is highly relevant.

Coherence

The intervention is well aligned with SDG goals:

- SDG 11: Make cities and human settlements inclusive, safe, resilient, and sustainable
- SDG 13: Take urgent action to combat climate change and its impacts
- SDG 15: Protect, restore, and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.

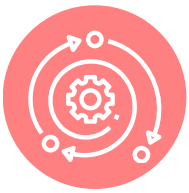
It also aligned with the Environment section of the ESG Sustainability report of the corporate particularly following:
Principle 6: Businesses should respect and make efforts to protect and restore the environment.
Principle 8: Businesses should promote inclusive growth and equitable development.

Effectiveness

The beneficiaries of the intervention, namely the community residing near the factory area, have experienced notable advantages. The temperature of the area has decreased, and with the increased biodiversity, the surroundings appear more attractive and calming, aiding in stress reduction. The previously barren land has now transformed into lush greenery, providing ample fresh air to the surrounding areas. This initiative has significantly reduced carbon emissions in the area. Furthermore, the availability of trees has helped the local community alleviate individual stress, improve mental health, and strengthen immune systems.

Efficiency

The project has effectively accomplished its intended goals and is contributing to the complex process of addressing climate change. Its success is evidenced by the efficient allocation of resources to achieve the desired outcomes.



Impact

The gardening intervention has markedly increased greenery in nearby areas of the MIDC factory in Kagal, leading to a significant decrease in pollution and a rise in biodiversity. This plantation initiative has transformed once-barren land into an aesthetically pleasing and tranquil environment, beautifying the area. Furthermore, it has contributed to lowering temperatures, thereby enhancing resilience against rising heat waves. The increased flora and fauna, along with the beautification of the area, have been advantageous for the local community, reducing individual stress, improving mental health, and strengthening immune systems.

Sustainability

The intervention has established a robust foundation for sustainability by employing native plant species and the Miyawaki method. This approach ensures the creation of a resilient ecosystem that is perfectly adapted to the local climate, soil conditions, and biodiversity. By focusing on increasing biodiversity, the program aimed to reduce pollution in the area, resulting in improved air quality and the creation of a healthier environment.

Relevance

Coherence

Effectiveness

Efficiency

Impact

Sustainability

Index : 5 Points - Very High ; 4 Points - High ; 3 Points - Moderate ; 2 Points - Low ; 1 Point - Very Low

CHAPTER 6
RECOMMENDATIONS

SCALE UP

The intervention has demonstrated success in improving the environment of the area near the MIDC factory, utilizing the Miyawaki method of plantation. To expand its impact, the intervention model can be scaled up to reach more factory areas and communities. This will require increased networking with stakeholders, including government and non-profit organizations, to broaden the program's reach and effectiveness.

MAINTENANCE AND MONITORING

The intervention entailed the planting of various plant species for the garden. It is imperative to establish and maintain a robust monitoring system to track the progress and outcomes of the Miyawaki garden over time.

DOCUMENTATION AND EVALUATIONS

While the project has demonstrated promising initial results, adopting a long-term integrated approach within the same project area is essential for ensuring sustainable development. Documenting the project's successes is crucial for disseminating valuable insights and lessons learned. This documentation facilitates the scaling up of the project across different sites, involving multiple stakeholders in the process.

DIVERSIFY PLANT SPECIES

While the use of native plant species is beneficial for the sustainability of the program, it is important to introduce a greater diversity of native plant species to further enhance biodiversity and ecosystem resilience. Additionally, considering incorporating a mix of trees, shrubs, flowers, and grasses can create a more balanced and dynamic ecosystem that provides habitat for a wide range of wildlife.

CHAPTER 7
CONCLUSION

The area surrounding the Kagal MIDC factory faced high pollution levels, resulting in alarming carbon emissions and escalating heat, which posed threats to both human populations and the climate. In response to this challenge, plantation emerged as a critical measure, with the Miyawaki method proving to be an effective technique for rapid and efficient plantation within a limited time and space. In addressing this challenge, the Indo Count Foundation initiated a plantation project aimed at establishing a complete garden in the Kagal MIDC factory area of Maharashtra using the Miyawaki method.

Key activities included the plantation of 13,500 plants, covering an area of 5 acres, with a remarkable 95% survival rate. The intervention successfully beautified and optimally utilized barren land, leading to improved air quality, controlled temperatures in the premises, and contributing to soil and water conservation. Overall, this initiative has made a significant contribution to climate change mitigation efforts.

Agriculture Development

Project GAGAN

CONTENTS

CHAPTER 1
INTRODUCTION

FGD with Farmers

BACKGROUND & NEED OF THE PROGRAM

The Gagan project was initiated in the year 2019 in collobration with CITI-CDRA in Warora and Bhadravati Tehsil of Chandrapur district. In the subsequent years, it was extended to Amravati, Buldhana and Parbani district to cover most of the cotton producing area of the Maharashtra. The farmers under the project are producing BCI cotton with premium quality. Recognising the critical need to address these challenges and boost the agricultural sector, Indo Count, a leading textile corporation, launched a Corporate Social Responsibility (CSR) initiative to transform cotton farming practices. The programme sought to bridge the gap between traditional and sustainable farming methods, empowering farmers to increase yields, product quality, and income. One of the program's primary objectives was to address cotton farmers' lack of knowledge and resources about sustainable agricultural practices. Many farmers were unaware of modern soil management, water conservation, and pest control techniques, limiting their ability to increase yields and reduce input costs. Furthermore, poor market connectivity and reliance on intermediaries exacerbated farmers' difficulties, limiting their ability to obtain fair prices for their produce.

> "The extensive course covered various topics, including innovative sowing patterns, effective pest control methods, and water conservation strategies. The information provided was not only theoretically sound but also extremely practical, tailored to the specific needs of our community".
>
> **(A Cotton Farmer, Anjangaon)**

Furthermore, farmer distress and suicides have occurred in Maharashtra's agricultural sector, particularly in the Vidharba region, as a result of crop failures and financial burdens. This highlighted the urgent need for interventions to improve cotton farming's economic viability and resilience. In response to these pressing needs, the Indo Count CSR initiative collaborated with NGOs, government agencies, and agricultural experts to create and implement comprehensive training programmes on sustainable farming practices. The programme aimed to empower farmers by providing them with the knowledge, resources, and support needed to adopt modern techniques and overcome existing challenges, resulting in a more sustainable and prosperous future for themselves and their communities.

> "We are deeply grateful for the programme team's unwavering commitment to our development and well-being. Their unwavering support has improved our quality of life and laid the groundwork for a brighter future for our community".
>
> **(Ramesh Ramrao Dhanorkar, Sathegaon, Anjangaon, Agri-graduates)**

OBJECTIVES OF THE PROGRAM

Empowerment of project farmers with the latest production, plant protection, and nutrient management technologies.

Enhancement of farmers' livelihoods through achieving sustainable yield production and minimising production costs.

Promotion of Good Agricultural Practices to enhance production efficiency.

Training on seed selection to maximise yield and improve rates of seed cotton.

Create awareness of Pink Bollworm Management to mitigate crop damage.

Training farmers on using and handling pesticides to ensure environmental and human health safety.

ABOUT THE INDO COUNT FOUNDATION

The Indo Count Foundation is a non-profit organisation that promotes sustainable development initiatives in the textile industry. The foundation was founded to make a positive social and environmental impact, and it operates under the umbrella of Indo Count Industries Limited, a leading global manufacturer of home textiles.

The Indo Count Foundation, which focuses on corporate social responsibility (CSR) and sustainability, works on various projects and initiatives to empower communities, promote environmental stewardship, and foster economic growth. With a focus on the well-being of cotton farmers and textile workers, the foundation works with stakeholders across the value chain to implement effective interventions. The foundation's initiatives cover various topics, including education, healthcare, livelihood enhancement, and environmental conservation. The foundation addresses complex social and ecological challenges by partnering with government agencies, non-governmental organisations (NGOs), academic institutions, and industry bodies.

The Indo Count Foundation's multifaceted approach to social responsibility and sustainability aims to have long-term positive impacts on communities, the environment, and the textile industry. The foundation establishes a model for corporate citizenship and social accountability in the global textile industry by promoting ethical and responsible business practices.

CHAPTER 2
RESEARCH METHODOLOGY

Indo Count Industries Limited commissioned SoulAce to conduct an impact assessment study to evaluate the immediate and enduring impacts of the program implemented under the " GAGAN Project for sustainability initiative for Upliftment of farmers". The impact assessment study was conducted in the FY 2023-24 fiscal year.

OBJECTIVE OF THE STUDY

To conduct an impact assessment study to assess the immediate and long-term effects of the Indo Count supported and implemented project GAGAN under the significant themes of farmer's upliftment and agriculture.

RESEARCH DESIGN

The research design is the conceptual framework within which the impact assessment is carried out.

THE MIXED METHODS APPROACH

The Mixed-Method Approach is best suited for this impact assessment. This approach offers critical new insights that enhance understanding of project access and its barriers in the community. Also, this mixed methodology allows us to interrogate impacts from multiple angles to understand and plan future projects.

The Mixed-Method Approach is a novel research approach that supports the systematic integration, or "mixing," of quantitative and qualitative data in a single study. Mixed methods research is predicated on the idea that it may provide more comprehensive answers to particular research questions than quantitative or qualitative techniques alone.

APPLICATION OF QUANTITATIVE TECHNIQUES

The Project GAGAN impact has been assessed quantitatively using a structured interview schedule. Quantitative research comprises data collecting equipment such as surveys and document analysis.

APPLICATION OF QUALITATIVE TECHNIQUES

Qualitative techniques were applied to improve accuracy, ensure anonymity, and obtain the community's and stakeholders' in-depth opinions. Qualitative methods such as interviews with key stakeholders in the project and community members were used. An interpretive framework is frequently used to guide qualitative research, presuming that different personal perspectives, contexts, and meanings shape realities.

Observations, focus group discussions (FGDs), case studies, in-depth interviews with key stakeholders, and content analysis were used for data collection.

ENSURING TRIANGULATION

Triangulation was needed to increase the credibility and validity of the research findings. It was also a measure taken to ensure the trustworthiness of the research process. The quantitative research findings have been verified with the insights from qualitative research, and the report has also been structured to reflect this point. Triangulation refers to using multiple datasets, methods, theories, and investigations to address a question. It's a research technique that can help mitigate any research biases and improve the validity and credibility of findings.

STUDY LOCATIONS

The GAGAN Project was initiated in the year 2019 in collaboration with CITI-CDRA in Warora and Bhadravati tehsils of Chandrapur district, Anjanagaon tehsils of Amravati district and Malkapur and Chikhali tehsils of Buldhana district situated in the Vidharbha region of Maharashtra. These areas are cotton-producing. Farmers are cultivating cotton under the BCI system.

BLOCK WISE DETAILS

Project Area/ Block	District	No. of Villages	No. of Farmer
Warora	Chandrapur	45	14,000
Selu	Parbani	20	3,000
Anjangaon	Amravati	16	2,916
Malkapur & Chikhali	Buldhana	30	4,557
6	**4**	**111**	**24,473**

SAMPLING FRAMEWORK

The study included 264 farmers who were part of the Gagan project from the above locations through simple random sampling and fifteen members from implementing organisations and other stakeholders involved through purposive sampling from this study universe.

DATA COLLECTION

Primary Data collected through survey, focus group discussions, observations, and survey techniques.

OECD-DAC FRAMEWORK FOR EVALUATION

This impact assessment employs the OECD-DAC framework for evaluation to maintain a pattern of research observations and keep research findings in line with specific, universally accepted criteria.

Source: UNDP-Independent Evaluation Office

Six criteria comprise the DAC framework developed by the Organization for Economic Cooperation and Development (OECD): relevance, effectiveness, coherence, efficiency, impact, and sustainability.

KEY STAKEHOLDERS

Farmers & Community members

Program implementing team

STUDY TOOLS

SoulAce has developed a mobile application platform for quantitative data collection. The research team used this app to collect primary data. This application has real-time data entry and data upload features with GPS location details and a questionnaire for interaction with the project beneficiaries; the application has a provision to take pictures of each respondent.

COMMITMENT TO RESEARCH ETHICS

- Confidentiality
- Anonymity
- Consent
- Non-Maleficence
- Transparency

Before any interview, informed consent was obtained from the stakeholders and individuals. First, the research team expressed their intentions to stakeholders and beneficiaries openly, honestly, and transparently.

"During the training, I discovered straight sowing techniques, improving my crops' quantity and quality. Drawing on their extensive experience, the trainers carefully guided us through each step, ensuring we understood the reasoning behind each exercise".

(Laxman, A Cotton Farmer)

CHAPTER 3
MAJOR KEY FINDINGS

This chapter summarises the project's key findings and significant outcomes, emphasising its effectiveness in achieving sustainable agricultural practices and improving farmers' livelihoods.

Geographical Coverage

The was implemented in Warora and Bhadravati tehsils of Chandrapur district, Anjanagaon tehsil of Amravati district, and Malkapur and Chikhali tehsils of Buldhana district in Maharashtra's cotton-producing Vidharbha region. These areas follow the Better Cotton Initiative (BCI) system.

SOCIO-AGRICULTURAL PROFILE OF FARMERS

CHART 1: EDUCATIONAL BACKGROUND OF THE RESPONDENT

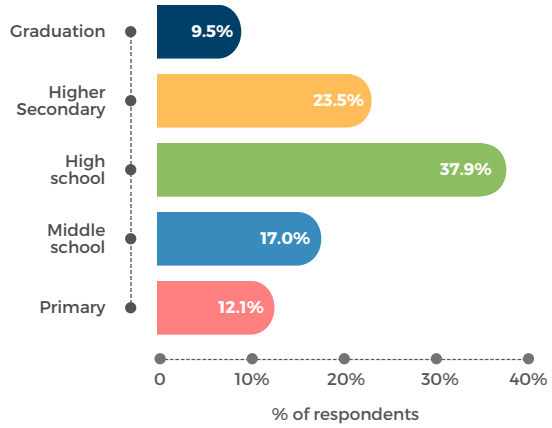


Chart 1 shows that respondents come from a variety of educational backgrounds. A sizable proportion have completed high school or higher education, indicating a fairly educated sample. However, there is a significant number of respondents with primary and middle school education, suggesting that educational attainment levels are diverse.

CHART 2: TOTAL LANDHOLDINGS

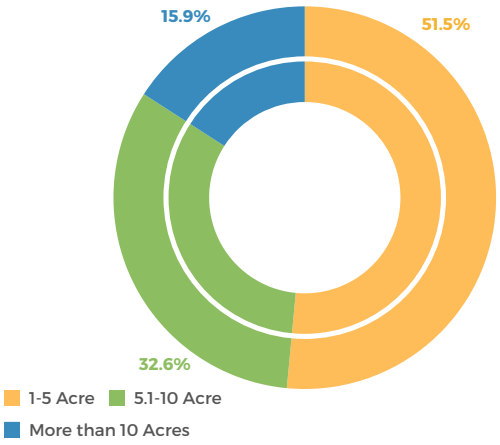


CHART 3: PERCENTAGE OF LAND USED FOR CULTIVATION OUT OF TOTAL LANDHOLDINGS

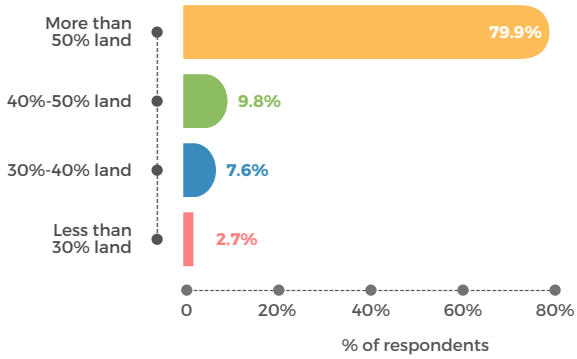


Chart 2 and 3 show a diverse distribution of landholdings among respondents, with the majority owning between 1 and 10 acres. Furthermore, a sizable proportion, more than half, devote a significant portion of their land to cultivation, indicating that respondents engage in intensive agricultural activities.

> "Thanks to the program's focus on community involvement, we farmers have developed a cooperative mindset. We support, share knowledge, and celebrate each other's successes. This camaraderie has proven to be as valuable as the soil we cultivate".
>
> **(Gopalrao Shyamrao Kakad, Warud kh, Anjangaon, A Cotton Farmers)**

CHART 4: INTERCROPS ALONG WITH COTTON

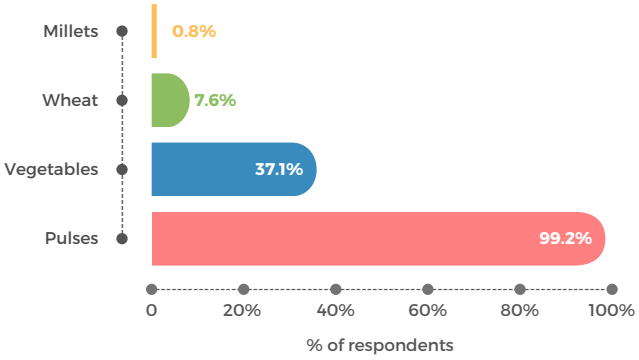
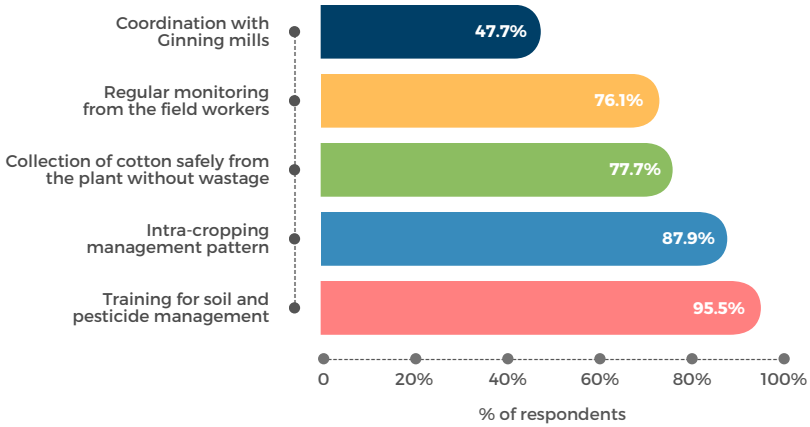


Chart 4 depicts the majority of respondents, nearly all, intercropping cotton with pulses, demonstrating a common agricultural practice aimed at crop diversification and land optimisation.

FGD AT WARORA

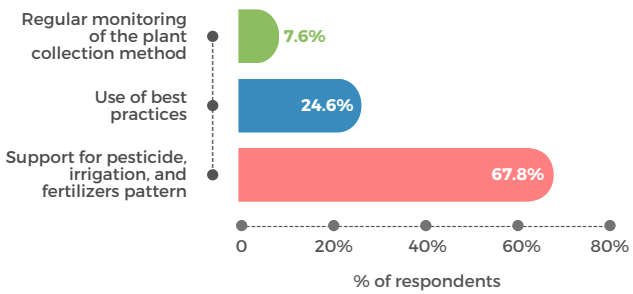
KEY PROGRAM INPUTS AND ACTIVITIES

CHART 5: SUPPORT RECEIVED FROM INDOCOUNT



MANURE MIXING

CHART 6: SUPPORT PROVIDED DAILY DURING CULTIVATION



Charts 5 and 6 demonstrate that Indo Count provided extensive training in soil and pesticide management, intra-cropping patterns, and safe cotton collection methods. Furthermore, significant support is provided daily during cultivation, focusing on pesticides, irrigation, and fertilisers, demonstrating a comprehensive approach to agricultural assistance.

CHART 7: FREQUENCY OF ATTENDING THE TRAINING

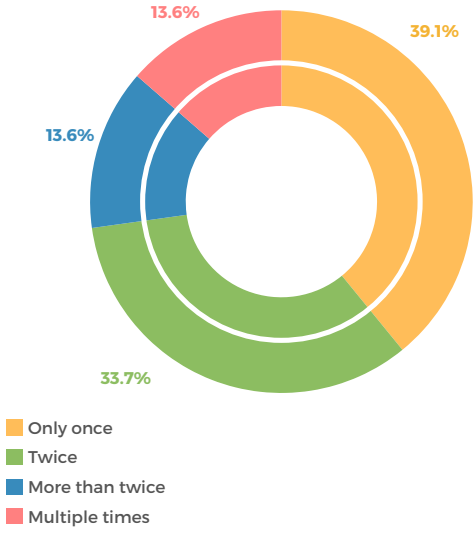


CHART 8: FREQUENCY OF VISIT BY THE INDO COUNT FACILITATORS

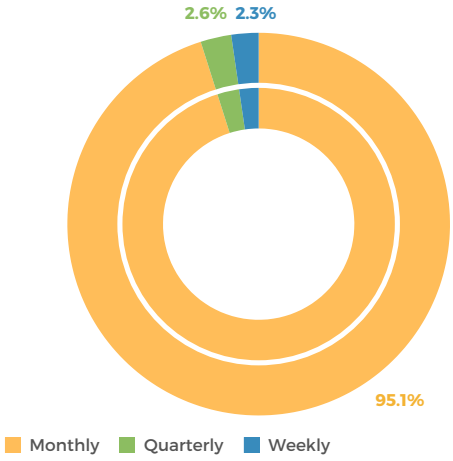


Chart 7 and 8 show that farmers' frequency of attending training sessions varies, with a significant proportion attending only once or twice. Furthermore, the data shows that most respondents receive monthly visits from Indo Count facilitators, indicating consistent support and guidance. This aligns with the training frequency, allowing for ongoing assistance and reinforcement of learned practices.

"We now have prosperous livelihoods thanks to the programme. We are cultivating hope and laying the groundwork for a better future for our families. We're not just growing cotton but creating a sustainable future".

(Gopalrao Shyamrao Kakad, Warud kh, Anjangaon, A Cotton Farmers)

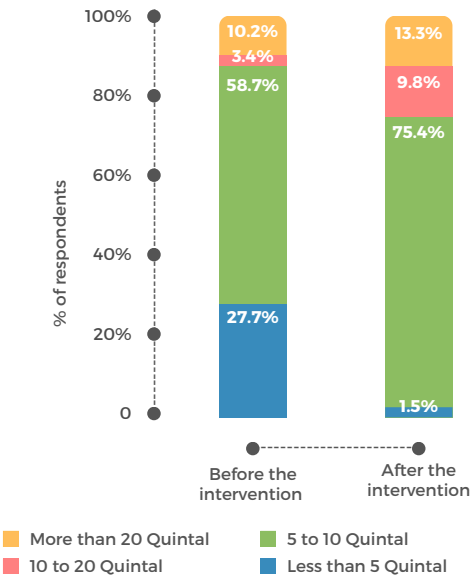
FERTILIZERS ADDITIONS TECHNIQUE

KEY OUTCOMES AND KEY IMPACTS

"The techniques introduced by Indo Count have transformed our approach to cotton farming. They have significantly improved our yields by drawing on scientific research and tailoring it to our region. Training in soil health, water management, and insect control increased productivity while ensuring our farming practices' sustainability".

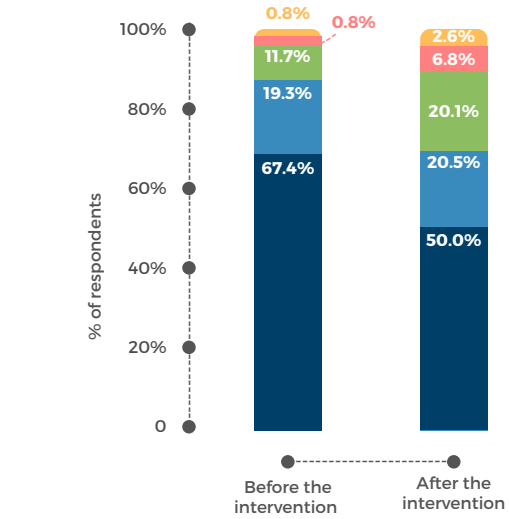
(Gopalrao Shyamrao Kakad, Warudkh, Anjangaon, A Cotton Farmers)

CHART 9: AVERAGE PRODUCTION OF COTTON USED TO YIELD / ACRE - BEFORE & AFTER THE INTERVENTION



In chart 9, the data show an overall increase in cotton yield per acre following the intervention, with a notable shift towards higher production categories. Most respondents saw significant improvements, especially in the 5 to 10 quintal and more than 20 quintal categories.

CHART 10: SOURCES OF IRRIGATION- BEFORE & AFTER THE INTERVENTION



The data in chart 10 show a shift towards more diverse irrigation sources following intervention, with less reliance on rain-fed irrigation. Drip and sprinkler irrigation methods are becoming increasingly popular, indicating a shift towards more efficient water management practices.

STORAGE OF SEEDS

CHART 11: PESTICIDE USED - BEFORE & AFTER THE INTERVENTION

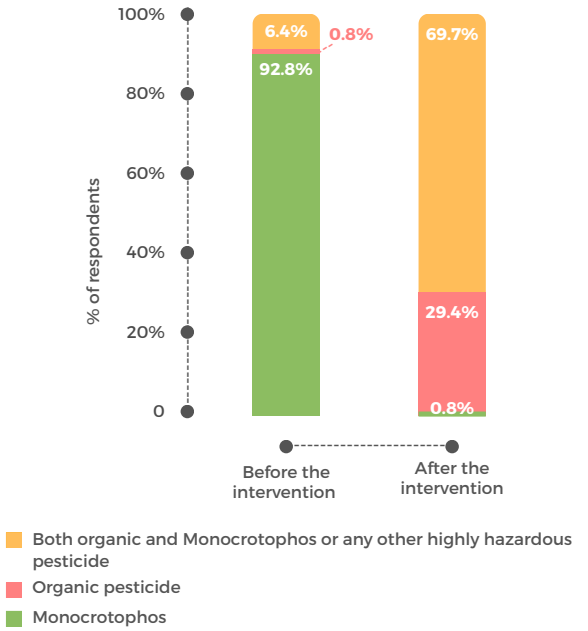


CHART 12: LAND CULTIVATED USING TOXIC AND ORGANIC PESTICIDES BEFORE & AFTER INTERVENTION

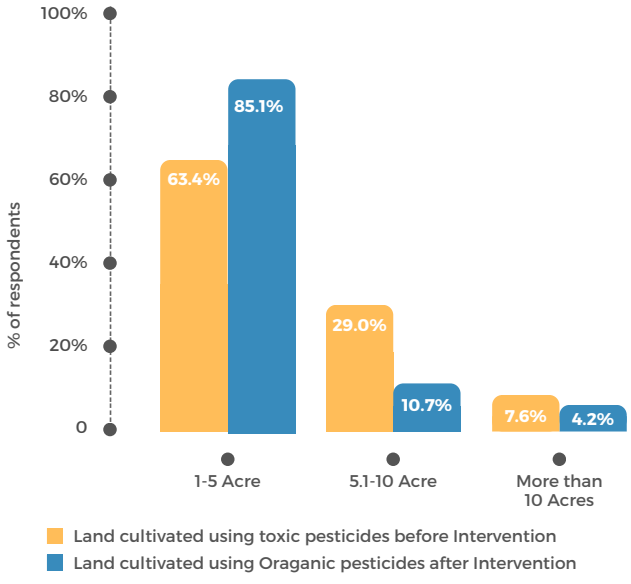


Chart 11 and 12 show that before the intervention, Monocrotophos was the most commonly used pesticide, with a noticeable shift towards organic pesticides following the intervention. Furthermore, data on land size show a significant reduction in toxic pesticides across all land size categories, particularly in smaller landholdings, following intervention.

CHART 13: FERTILIZERS USED- BEFORE & AFTER THE INTERVENTION

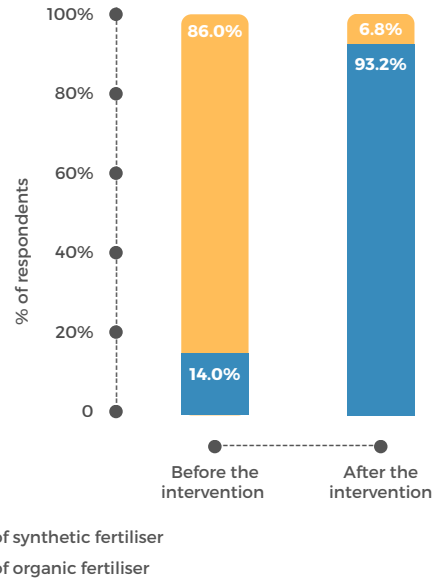


CHART 14: LAND CULTIVATED USING TOXIC AND ORGANIC FERTILIZERS BEFORE & AFTER INTERVENTION

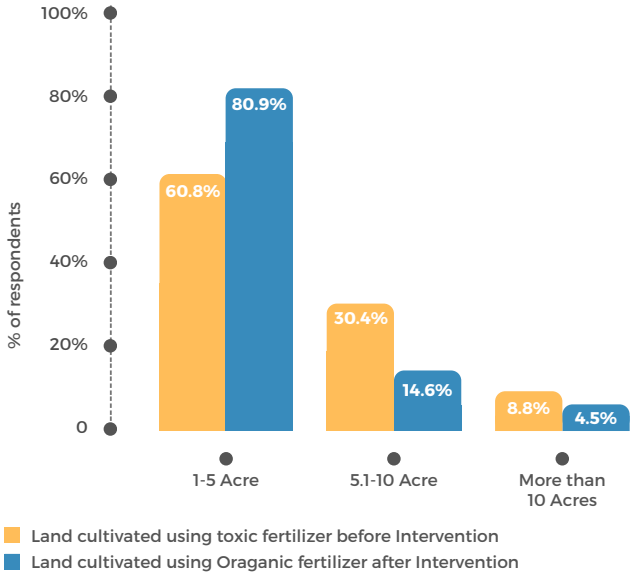


Chart 13 and 14 show that synthetic fertilisers were the most commonly used before the intervention, but there was a significant shift towards organic fertilisers after the intervention. Following the intervention, there was a substantial decrease in the use of toxic fertilisers across all land size categories, with smaller landholdings showing the most significant reduction.

COST, PRODUCTION, AND INCOME

CHART 15: AVERAGE INPUT COST USED FOR COTTON PRODUCTION- BEFORE & AFTER THE INTERVENTION

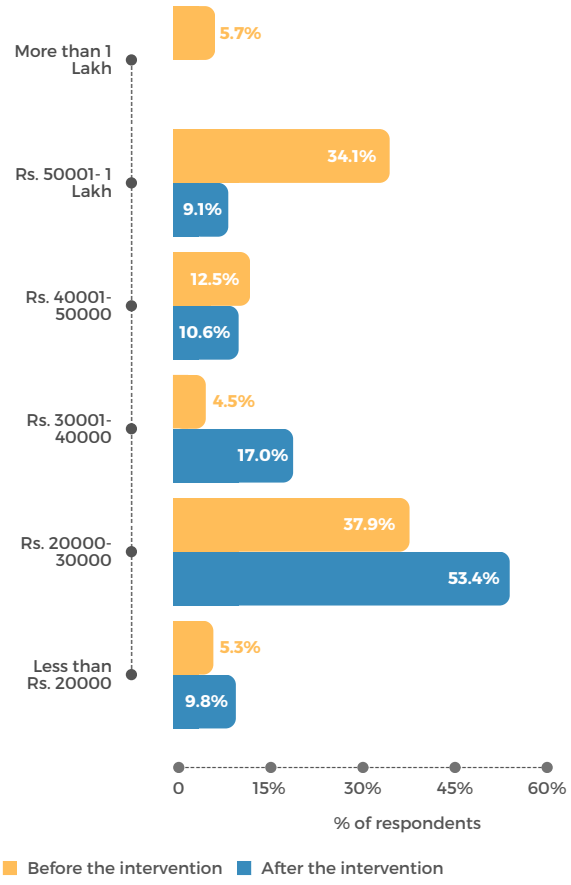
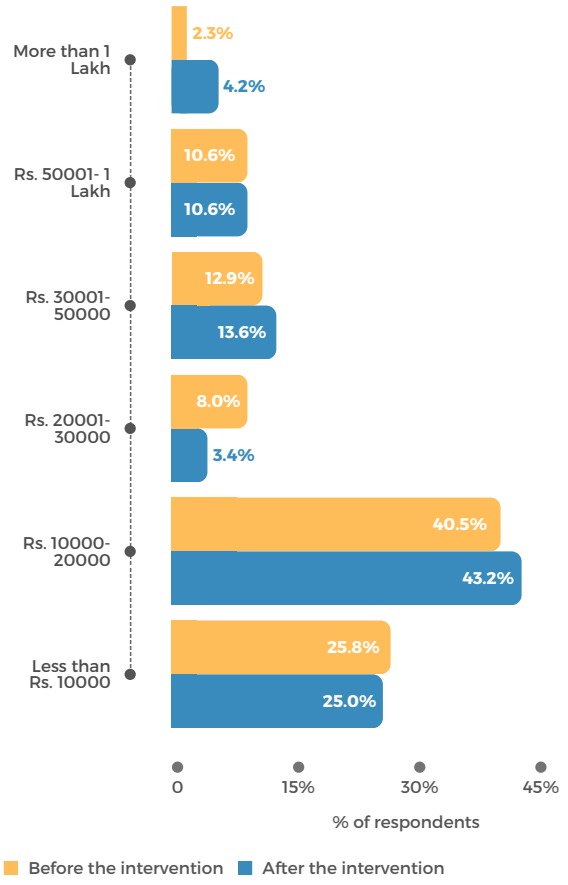


CHART 16: PROFIT EARNED FROM THE COTTON PRODUCTION- BEFORE & AFTER THE INTERVENTION



Charts 15 and 16 show that before the intervention, most respondents had input costs ranging from Rs. 20,000 to Rs. 1 lakh, but after the intervention, there was a significant decrease in higher input cost categories. Before the intervention, a considerable portion was earned between Rs. 10,000 and Rs. 20,000, but this category slightly increased afterwards. Overall, the intervention resulted in marginal increases in profit levels across income brackets.

FGD AT ANJANGAON

CHART 17: EXTENT OF REDUCTION IN THE WASTAGE OF THE COTTON BALLS THAN EARLIER

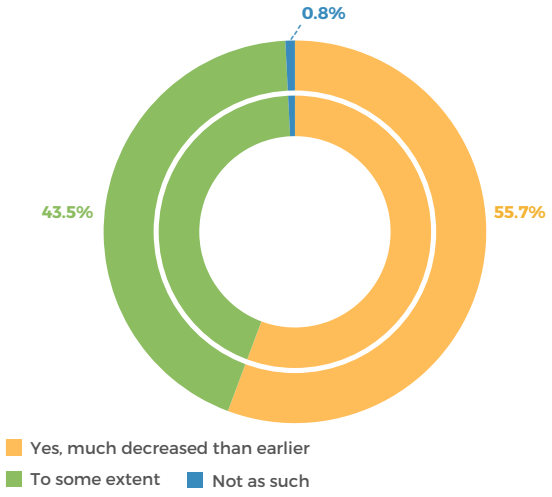


CHART 18: EXTENT OF INCREASE IN TOTAL AMOUNT OF CLEAN COTTON FIBRE RECEIVED COMPARED TO EARLIER

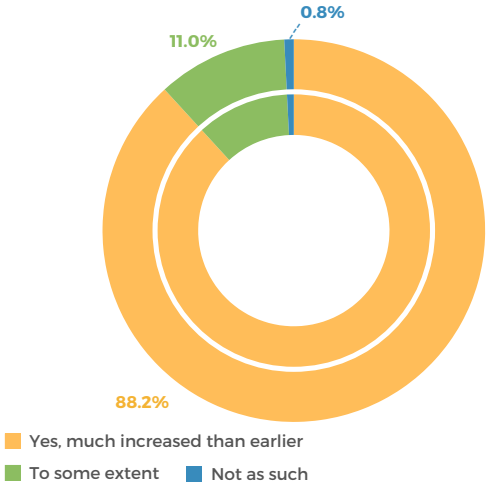


Chart 17 and 18 show that farmers widely reported a significant reduction in cotton ball waste following the intervention, with the majority experiencing a substantial decrease. Furthermore, the total amount of clean cotton fibre received increased significantly compared to previous years, indicating improved efficiency and productivity in cotton production following the intervention.

KEY IMPACT

CHART 19: COTTON PRODUCTION INCOMES HAVE INCREASED FARMERS' ABILITY TO AFFORD HEALTHCARE, MEDICINE, AND PREVENTIVE CARE.

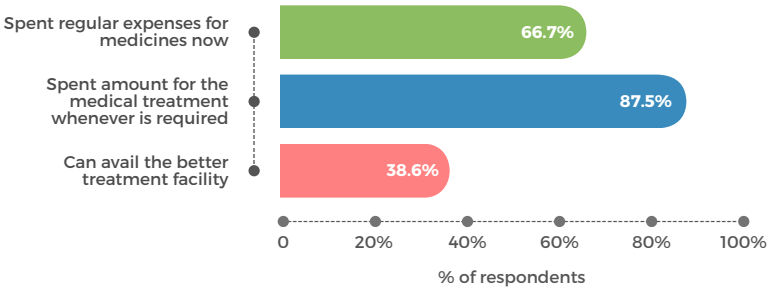


Chart 19 shows that, as income from cotton production increased, many farmers reported improved access to better treatment facilities. However, a significant portion continues to be spent on medical treatment as needed, indicating ongoing healthcare needs.

CHART 20: HOW COTTON FARMING INCOME AFFECTED FARMERS' ABILITY TO BUY AND MAINTAIN LAND, LIVESTOCK, AGRICULTURAL MACHINERY, VEHICLES, HOUSES, AND ORNAMENTS.

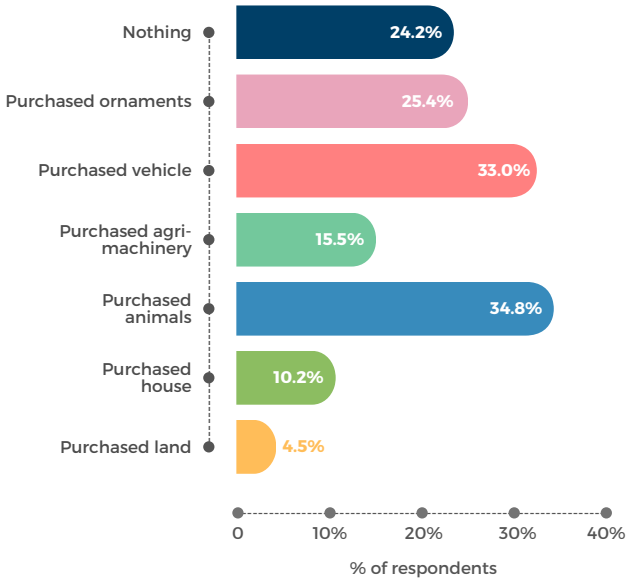


Chart 20 shows farmers spent their increased cotton farming income on productive assets such as animals, vehicles, and ornaments. Some also purchased land, houses, and agricultural machinery, but a sizable proportion reported no significant purchases.

OVERALL IMPACT CREATED (INDIVIDUAL)

KEY CHALLENGES AND BARRIERS

IMPACT CREATED AT MULTIPLE LEVELS

INDIVIDUAL LEVEL

Enhanced Income

Skill Development

Empowerment

FAMILY LEVEL

Improved Livelihoods

Food Security

Socio-economic Stability

COMMUNITY/ VILLAGE LEVEL

Economic Growth

Knowledge Sharing

Environmental Sustainability

DISTRICT LEVEL

Agricultural Transformation

Poverty Alleviation

Policy Influence

STATE LEVEL

Economic Development

Food Security

Sustainable Agriculture Promotion

DISTRICT LEVEL

Agricultural Innovation

Policy Formulation

Economic Growth

KEY ELEMENTS OF PROJECT SUSTAINABILITY

COMMUNITY ENGAGEMENT

Local communities' active participation and involvement in project planning, implementation, and decision-making processes ensures project ownership and sustainability.

CAPACITY BUILDING

Building farmer and local stakeholder capacity through training, education, and skill development programmes gives them the knowledge and resources they need to manage cotton production sustainably.

ECONOMIC VIABILITY

Promoting economic viability through increased income generation, market access, and value addition ensures that farmers can continue to invest in sustainable practices while maintaining their livelihoods in the long run.

ENVIRONMENTAL CONSERVATION

Including environmental considerations in agricultural practices, such as water conservation and soil health management, ensures the long-term viability of agricultural production systems.

KNOWLEDGE SHARING AND LEARNING

Facilitating knowledge sharing, learning exchanges, and disseminating best practices among stakeholders promotes innovation, replication, and scaling up successful approaches, resulting in long-term impact beyond the project's boundaries.

"Our success is dependent on the trainers' expertise and passion. Their hands-on approach and extensive knowledge of sustainable agriculture have provided us with innovative techniques that are both environmentally friendly and highly productive".

(Ramesh Ramrao Dhanorkar, Sathegaon, Anjangaon, Agri-graduates)

BHADRAWATI FARMS

04. OECD FRAMEWORK

Relevance

The project addresses critical issues in sustainable agriculture, such as improving cotton farming practices, increasing farmer livelihoods, and promoting environmental sustainability. It is consistent with national and international development goals for poverty reduction, food security, and sustainable development.

Coherence

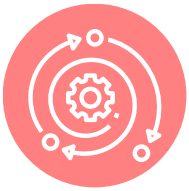
This project aligns with national goals related to poverty reduction, food security, and sustainable agriculture, as well as Sustainable Development Goals (SDGs) such as SDG 1 (No Poverty), SDG 2 (Zero Hunger), SDG 8 (Decent Work and Economic Growth), SDG 12 (Responsible Consumption and Production), and SDG 13 (Climate Action).

Effectiveness

The project's effectiveness is demonstrated by its ability to achieve its stated goals, such as improving cotton yield, increasing farmer income, and reducing waste through sustainable farming practices. The training and capacity-building activities have provided farmers with the skills and knowledge they need to implement modern agricultural techniques, resulting in tangible increases in productivity and profitability.

Efficiency

The project demonstrates efficiency by using available financial, human, and technical resources to achieve maximum impact. Investments in training, extension services, and technology transfer have been directed towards areas with the most significant potential for improvement, thereby maximising the return on investment.



Impact

The project has benefited farmers, families, communities, and the agricultural sector as a whole. It has improved farmers' livelihoods by increasing income, expanding access to healthcare and education, and empowering women and marginalised groups. Furthermore, the project's implementation of sustainable farming practices has resulted in environmental benefits such as soil conservation, water management, and biodiversity preservation.

Sustainability

The project demonstrates a strong commitment to sustainability by advocating for long-term solutions that strengthen resilience, increase adaptive capacity, and protect natural resources. It has integrated sustainability principles into agricultural practices, ensuring the benefits last beyond the project's lifespan.

Relevance

Coherence

Effectiveness

Efficiency

Impact

Sustainability

Index : 5 Points - Very High ; 4 Points - High ; 3 Points - Moderate ; 2 Points - Low ; 1 Point - Very Low

CHAPTER 5
RECOMMENDATIONS

These recommendations are based on the impact assessment team's interactions with farmers and the project implementation team across three Villages.

Farmers should receive ongoing training and extension services to keep up with the latest agricultural practices, market trends, and technological advancements.

Community engagement should be increased by organising farmer field days, knowledge-sharing events, and farmer-to-farmer exchange programmes to facilitate peer learning and collaboration.

There should be more opportunities to scale up successful cotton production models to reach more farmers and replicate the project's success in other regions with similar agro-climatic conditions.

Women farmers should be encouraged to participate in this type of initiative for the holistic development of rural communities.

CHAPTER 6
CONCLUSION

The Indo Count's sustainable model of cotton production has addressed key agricultural challenges and promoted sustainable development in rural communities. The project has equipped farmers with the knowledge and skills to implement innovative farming practices through baseline surveys, capacity-building sessions, and practical demonstrations. The project has positively impacted economic empowerment, sustainable agriculture, social cohesion, and environmental conservation.

The sustainable model of cotton production has helped rural households overcome poverty and economic insecurity by increasing farmers' income and promoting resource-efficient farming. Sustainable agriculture improves soil fertility and crop quality and reduces environmental degradation, supporting food security and ecological sustainability. Gathering farmers and empowering them to own their farms has promoted social inclusion and community engagement.

To sustain project momentum, the programme needs continuous support and investment in capacity-building, research, and technology transfer. Increasing outreach to farmers and scaling up a successful sustainable model of cotton farming models could boost the program's impact. Government agencies, NGOs, and other stakeholders can collaborate to leverage resources and expertise to address systemic issues and enable sustainable agriculture.