

Impact Assessment Report

Infosys Limited

May 2024

Price Waterhouse Chartered Accountants LLP

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Table of contents

1.	Introd	uction and Background	8
	CSR a	t Infosys Limited	9
2.	Execu	tive Summary	11
3.	Metho	dology for Impact Assessment	18
	3.1.	Scope of the Study	19
	3.2.	Detailed Methodology	21
4.	Projec	t 1: Improved Woodstoves in Udaipur- Helping Women and Environment	24
	4.1.	Background	25
	4.2.	About the Project	25
	4.3.	Method of Impact Assessment	26
	4.4.	Analysis & Findings	28
	4.5.	Alignment to the Infosys Limited's CSR policy, and UN SDGs	37
	4.6.	Study Limitation	37
	4.7.	Case Stories	37
5.	Projec	t 2: Breathing Space Improved Cooking Stoves Programme, Satara	39
	5.1.	Background	40
	5.2.	About the Project	40
	5.3.	Method of Impact Assessment	41
	5.4.	Analysis & Findings	42
	5.5.	Alignment to the Infosys Limited's CSR policy and the UN SDGs	51
	5.6.	Study Limitation	52
	5.7.	Case Stories	52
6.	Projec	t 3: Breathing Space Improved Cooking Stoves Programme, Ganjam	53
	6.1.	Background	54
	6.2.	About the Project	54
	6.3.	Analysis & Findings	56
	6.4.	Alignment to the Infosys Limited's CSR policy and the UN SDGs	67

4

		N
	\sim	
		N

	6.5.	Study Limitation	67
	6.6.	Case Stories	68
7.	Projec	t 4: Construction of Girls' hostel building at IIIT-Dharwad campus	69
	7.1.	Background	70
	7.2.	About the Project	70
	7.3.	Method of Impact Assessment	70
	7.4.	Analysis & Findings	72
	7.5.	Alignment to the Infosys Limited's CSR policy, and UN SDGs	76
	7.6.	Study Limitation	76
	7.7.	Case Story	76
8.	Projec	t 5: Provide infrastructure for the Construction of the Museum of Art and Photog	raphy
			78
	8.1.	Background	79
	8.2.	About the Project	79
	8.3.	About the Implementing Partner	80
	8.4.	Method of Impact Assessment	81
	8.5.	Analysis & Findings	82
	8.6.	Alignment to the Infosys Limited's CSR policy and the UN SDGs	92
	8.7.	Study Limitation	92
	8.8.	Case Stories	93
9.	Projec	t 6: Vidya Ganga	94
	9.1.	Background	95
	9.2.	About the Project	95
	9.3.	About the Implementing Partner	96
	9.4.	Method of Impact Assessment	96
	9.5.	Analysis & Findings	98
	9.6.	Alignment to the Infosys Limited's CSR policy and the UN SDGs	105
	9.7.	Study Limitations	106
	9.8.	Case Stories	106
10.	Projec	t 7: Construction of multipurpose hall for 200 girls	107
	10.1.	Background	108



	10.2.	About the Project	108
	10.3.	About the Implementing Partner	108
	10.4.	Method of Impact Assessment	109
	10.5.	Analysis & Findings	110
	10.6.	Configured to the Infosys Limited's CSR policy and the UN SDGs	119
	10.7.	Study Limitation	120
	10.8.	Case Story	120
11.	Projec	t 8: Rajya Mahila Okoota (RMO) & Grakoos	121
	11.1.	Background	122
	11.2.	About the Project	122
	11.3.	About the Implementation Partner	123
	11.4.	Method of Impact Assessment	124
	11.5.	Analysis & Findings	125
	11.6.	Alignment to the Infosys Limited's CSR policy and the UN SDGs	139
	11.7.	Study Limitation	139
	11.8.	Case Story	139
12.	Projec	t 9: Kai Hididu Nadesennanu	141
	12.1.	Background	142
	12.2.	About the Project	142
	12.3.	Method of Impact Assessment	144
	12.4.	Analysis & Findings	146
	12.5.	Alignment to the Infosys Limited's CSR policy and the UN SDGs	157
	12.6.	Study Limitation	157
	12.7.	Case Stories	157
13.	Projec	t 10: COVID-19 Support to Gandhi Hospital	159
	13.1.	Background	160
	13.2.	About the Project	160
	13.3.	Method of Impact Assessment	162
	13.4.	Analysis & Findings	163
	13.5.	Alignment to the Infosys Limited's CSR policy and the UN SDGs	168
	13.6.	Study Limitations	168

	13.7.	Case Stories	169
14.	-	t 11: Provision of Tablets for 10th and 12th standard students to ensure continuin nance in their studies- 2020-21	ty and 170
	14.1.	Background	171
	14.2.	About the Project	171
	14.3.	About Implementing Partner	173
	14.4.	Method of Impact Assessment	174
	14.5.	Analysis & Findings	175
	14.6.	Alignment to the Infosys Limited's CSR policy, and UN SDGs	181
	14.7.	Study Limitation	182
	14.8.	Case Stories	182
15.	Project	12: Covid-19 Support to Chinmaya Mission Hospital	183
	15.1.	Background	184
	15.2.	About the Project	184
	15.3.	Method of Impact Assessment	186
	15.4.	Analysis & Findings	187
	15.5.	Alignment to the Infosys Limited's CSR policy, and the UN SDGs	196
	15.6.	Study Limitation	197
	15.7.	Case Stories	197
16.	Project	13: Holistic Village Development by Community Participation	198
	16.1.	Background	199
	16.2.	About the Project	199
	16.3.	About the Implementing Partner	200
	16.4.	Method of Impact Assessment	200
	16.5.	Analysis & findings	203
	16.6.	IRECS Analysis	213
	16.7.	Alignment to the Infosys Limited's CSR policy, and UN SDGs	215
	16.8.	Study Limitation	215
	16.9.	Case Stories	215

7



1. Introduction and Background

CSR at Infosys Limited

Infosys Limited (Infosys) is a global next-generation digital services and consulting company headquartered in Bengaluru, India. Infosys offers a wide range of services which include consulting, information technology, and outsourcing. Founded in 1981, the Company has grown to become one of the leading Information Technology (IT) companies in the world, having a presence in more than 50 countries¹. Along with the sustained financial performance, Infosys undertakes many Corporate Social Responsibility (CSR) initiatives for holistic community development and institution building to serve the enrichment and evolution of businesses and communities.

About the Infosys Foundation

With the aim of community development, Infosys Foundation was established in 1996 as a not-for-profit organization way before CSR Rules in India became mandatory.² Infosys Foundation partners with various government bodies and institutions organizations, social entrepreneurs, and other organizations to create an impact on the local communities. Infosys Foundation is working towards resolving some pressing challenges faced by the communities by improving Healthcare Infrastructure, supporting Education, Gender Equality and Empowerment of Women, Environmental Sustainability, Rural Development Projects, National Heritage, Art and Culture & Disaster Management.³ Below Figure depicts a quick overview of the CSR landscape of Infosys ^{4&5}:

Figure 1: Creating lasting impact through CSR (FY 2022-23)*



*Source is from Infosys Foundation Annual Report for FY 2022-23 since Annual Report for FY 2023-24 is under finalisation.

Infosys Foundation works towards the mission to support the less privileged sections of society, create opportunities and strive towards a more equitable society⁶. To undertake the CSR projects, the Foundation has identified impactful CSR focus areas which are segregated into primary and secondary themes to create a wider and lasting impact on the local community. The below Figure represents the CSR focus areas of Infosys Limited bifurcated into primary and secondary themes⁷:

⁵ Source: <u>https://www.infosys.com/investors/reports-filings/annual-report/annual/documents/infosys-ar-23.pdf</u>

¹ Source: <u>https://www.infosys.com/</u>

² Source: <u>https://www.infosys.com/investors/corporate-governance/documents/corporate-social-responsibility-policy.pdf</u>

³ Source: https://www.infosys.com/infosys-foundation/about/reports/documents/infosys-foundation-report-2022-23.pdf

⁴ The above data / information has not been reviewed or validated as part of the impact assessment study.

⁶ Source: <u>https://www.infosys.org/infosys-foundation.html</u>

⁷ Source: <u>https://www.infosys.com/infosys-foundation/about/reports/documents/infosys-foundation-report-2022-23.pdf</u>



Figure 2: CSR Themes of Infosys Limited





2. Executive Summary

Scope of the Study:

Infosys Limited has been implementing various CSR Projects for holistic community development and institution building to serve the enrichment and evolution of businesses and communities. It has engaged PWCALLP to provide support and assistance for an independent review and impact assessment of following 13 CSR Projects identified by the Management as per the provisions of Companies (Corporate Social Responsibility Policy) Amendment Rules, 2021:



Methodology:

In order to assess the impact of its CSR projects, a mixed-method approach was deployed which involved either one of or both the quantitative and qualitative research tools (as relevant) for primary data collection. Using these tools, team conducted the interactions (virtual and on-field) with the project beneficiaries and other relevant stakeholders. Post data collection and analysis, the key insights and findings were collated in the form of a consolidated report for Management's consideration. This study was guided by the Inclusiveness, Relevance, Effectiveness, Convergence and Sustainability (IRECS) Framework which was used to provide overall feedback on the efficacy of implementation as well, as its efficiency in terms of achievement of the desired project outputs with reference to inputs.

Summary of Key Findings:

As a part of the study, a brief overview of findings for all the 13 CSR projects (theme-wise) is provided below:

Theme 1: Education

#	Overview of CSR Project under Assessment	Project Location	Implementation Mechanism	Total Beneficiaries	Total Spent	Quantitative Sample for the Study
1.	VidyaGanga – a digital School Program which aims to ensure continuity of learning for rural students	9 States across the country	eVidyaloka Trust (Implementation Partner)	21.45 lakh children	INR 3.00 Crores	271
2.	Kai Hididu Nadesennanu - a digital education program to ensure improve learning outcomes	23 districts, Karnataka	Yuva Brigade (Implementation Partner)	10,000+ students	INR 1.47 Crores	264
3.	Provision of Tablets for 10th and 12th standard students to ensure continuity and performance in their studies - 2020-21	38 districts across Karnataka, Tamil Nadu, & Puducherry	Dhwani Foundation (Implementation partner)	1,300 students	INR 1.19 Crores	226

1. Vidya Ganga:

- 98% respondents shared (n=271) that contents provided though the project was accessible and conducive to quality education through tailor-made modules as per the local language and state board on an online platform.
- 99% of the students (n=161) reported improvement in their school exam results. Further, the project has been impactful in enabling adoption and continuity of the modules as there were no dropouts observed in between the courses.
- 99% respondents (n=146) shared that the workbooks and worksheets complement the live classes and video lessons, helping in revising the subjects and developing better understanding.
- The selected classroom assistants have proven to be very effective as they support students in their studies and doubt clearing sessions.

2. Kai Hididu Nadesennanu

- 99% respondents (n=264) found the **3D** animated videos useful as it helped them to understand complex concepts. Additionally, 97% respondents (n=264) believed this method has been more effective than chalkboard method.
- 98% respondents (n= 264) stated that they had developed an interest and aptitude for Mathematics and Science. They also felt that employing the tablet and the digital learning materials had a positive impact on their academic performance.
- Respondents believed that this project was beneficial for exam preparation, particularly for the 10th grade students. 99.6% respondents (n=264) found that chapter-specific practice tests, continuous evaluations, and analysis helped them in preparing for exams.
- Over one-third (37%, n=264) of the respondents observed a decline in the number of dropouts among their peers.
- 3. Provision of Tabs for 10th and 12th standard students to ensure continuity and performance in their studies 2020-21
 - 81% respondents (n=226) did not have access to any digital learning device prior to receiving tablets. Hence, the project catered to the most needy and vulnerable students during Covid-19.
 - All the respondents agreed that they had easy access to the online learning content through tablets. Regular usage has motivated them towards using technology in education.



- 85% respondents (n=226) did not face any technical issues in using the tablets, indicating durability
 of the tablets. Certain other respondents (15%, n=226) who did face some issues rectified them by
 themselves watching online tutorials or videos.
- Respondents rating out of 5 for the following, ease of usage of tablets (4.6), quality of tablets (4.5), and the positive impact on studies (4.8)⁸.
- 79% respondents (n=226) reported using the tablets even for their higher studies, showcasing the sustainability of the project.

Theme 2: Healthcare

#	Overview of CSR Project under Assessment	Project Location	Implementation Mechanism	Total Beneficiaries	Total Spent	Quantitative Sample for the Study
1.	Covid-19 support to Chinmaya Mission Hospital- critical medical equipment support	Bengaluru, Karnataka	Self-implementation	-	INR 5.12 Crores	NA ⁹
2.	Covid-19 support to Gandhi Hospital- critical medical equipment support	Secunderabad, Telangana	Self-implementation	-	INR 1.19 Crores	NA ⁹

1. Covid-19 support to Chinmaya Mission Hospital

- Early provision of ICU beds ensured that the hospital effectively met the surging demand of the patients while ventilators enhanced the patient recovery capabilities.
- Digital X-ray machine generated instant results which saved crucial time in the diagnosis of the infection. Further, the protective gears helped tackle shortage of such utilities in the market, especially at the onset of the pandemic. This support spanned for 8 months which ensured safety of all healthcare workers in the hospital.
- Besides, Oxygen plant, CPAP machines and oxygen concentrators contributed towards **providing quality** treatment to the patients with respiratory distress.

2. Covid-19 support to Gandhi Hospital

- Adequate deployment of BiPAP machines enhanced the hospital's capabilities to provide advanced respiratory care, especially post surgeries. It supported non-invasive ventilation (NIV) to individuals requiring assistance in breathing and further, reduced workload on hospital staff.
- Overall, the hospital was able to treat over 100,000 patients during the pandemic, with approximately 50,000 patients treated using ventilators.
- This support contributed to the collective impact in meeting increased Covid-19 patient load.

Theme 3: Women Empowerment

#	Overview of CSR Project under Assessment	Project Location	Implementation Mechanism	Total Beneficiaries	Total Spent	Quantitative Sample for the Study
1.	Construction of Girls' hostel building at IIIT Dharwad campus- providing modern residential facility	Dharwad, Karnataka	Self-implementation	300 girl students (maximum capacity)	INR 28.25 Crores	77
2.	Holistic Village Development by community participation - to solve community issues and attain sustainable village development	Jhabua and Alirajpur districts, Madhya Pradesh	Shivganga Samagra Gramvikas Parishad (Implementation partner)	5,170 local community members	INR 5.00 Crores	256
3.	Construction of multipurpose hall for 200	Mysuru, Karnataka	Self-implementation	200 girls	INR 2.50 Crores	108

⁸ On a scale of 5 (1 being the lowest and 5 being the highest)

14

⁹ NA indicates not applicable as it was a qualitative study

#	Overview of CSR Project under Assessment	Project Location	Implementation Mechanism	Total Beneficiaries	Total Spent	Quantitative Sample for the Study
	girls - at Shakthidhama women rehabilitation center					
4.	Rajya Mahila Okoota (RMO) & Grakoos - To uplift the underserved and marginalised communities	Raichur & Yadgir districts, Karnataka and Mahabubnagar, Telangana		6,350 local community members	INR 1.50 Crores	261

- 1. Construction of Girls' hostel building at IIIT Dharwad campus
 - Some of the pertinent problems faced by girls before this project were congested rooms, insufficient washrooms, and no common hall etc., These were addressed through this project
 - All the respondents (n=77) provided positive feedback on the various facilities of new hostel (such as rooms, washroom, common room, and dining hall) with an average rating of 3.9¹⁰. An average rating of 4 was also received on quality of infrastructure, cleanliness and hygiene, and safety and security at the new facility.
 - Further, since the hostel facility is within the institute's campus, these girls can spend more time at the library post their classes which created a **positive impact on their academics**.

2. Holistic Village Development by community participation

- Youth training activities were instrumental in helping tribal communities find their lost sense of pride in their culture (60.4%, n=48). Necessary support was provided to youth in engaging with livelihood generation activities which increased their monthly income by ~10-20%.
- Respondents could now apply knowledge to their village specific issues and solve it with technical expertise taught during training (95%, n=19). Skills such as bamboo handicrafts, provided respondents with the confidence to become financially independent (39.5%, n=38).
- Families experienced reduced expenses (INR 300/- to INR 1,000/-) on healthcare with women empowered to screen illnesses timely (96%, n=51). Further, nutritional intake of families was enhanced with the consumption of fruits and vegetables from the family groves (55%, n=64).
- Organic farming training led to reduce cost of cultivation by INR 6,000/- and increase income by INR 20,000-30,000/- (for one acre of land). Besides, afforestation activities under "matavan" helped in improving the green cover and revive protected forests.

3. Construction of multipurpose hall for 200 girls

- Shakthidhama center is well-equipped now with a covered space to conduct socio-cultural programmes, **minimising the risk of weather disruptions** during such programmes.
- Almost all the respondents (N=107) participated in the co-curricular activities held within the multipurpose hall.
- The dining hall within the Infosys Foundation block has been a useful addition to the center in comparison to the earlier. Now, all the girls have their meals as a group, creating an opportunity for team bonding.
- In terms of hygiene, 95% respondents rated the dining hall very good.
- The digital library is awaiting other funding partner to procure the required infrastructure necessary for operationalising the library.

4. Rajya Mahila Okoota (RMO) & Grakoos

- All the respondents (n=221) mentioned that awareness campaigns **contributed to the reduction of child labor, child marriage and the Devadasi System**. This intervention also enabled women to identify and report such cases to appropriate authorities.
- End-to-end support was provided swiftly to victims facing issues due to domestic violence and it further instilled confidence in them to pursue livelihood opportunities.



¹⁰ 1 being the lowest and 5 being the highest (on a scale of 5)



- Women cooperative banks provided **financial independence to women** through **offering loans on low interest rates** without any collateral, and flexible repayment mechanisms.
- Students (100%, n=33) agreed that scholarship was beneficial as it reduced the risk of drop-out (especially girls). This intervention also reduced financial burden (~58%, n=33), enabling students to focus more on studies and further, pursue higher education of their choice.
- Students also felt that education support has helped them to **perform better academically** (100%, n=7) besides **increased participation** in **co-curricular activities**.
- The project also ensured any non-compliance related to Right To Education (RTE) Act in local government schools was identified and reported to authorities for improvements. In addition,
- Taluk level meetings provided a **platform** to community teams **to disseminate updates on village level issues** and resolve them.

Theme 4: Sustainability

#	Overview of CSR Project under Assessment	Project Location	Implementation Mechanism	Total Beneficiaries	Total Spent	Quantitative Sample for the Study
1.	Improved Woodstoves in Udaipur – Helping Women and Environment by addressing the issue of indoor air pollution	Udaipur, Rajasthan	Udaipur Urja Initiatives Producer Company Limited (Technical Partner)	15,400 households	INR 9.20 Crores	266
2.	Breathing Space Improved Cooking Stoves Programme in Ganjam- solving the indoor air pollution	Ganjam, Odisha	Envirofit Private limited (Technical Partner)	37,200 households	INR 7.20 Crores	269
3.	Breathing Space Improved Cooking Stoves Programme in Satara- solving the indoor air pollution	Satara, Maharashtra		37,200 households	INR 6.95 Crores	269

1. Improved Woodstoves in Udaipur

- 100% respondents (n=266) confirmed that the saved cooking time enabled them to focus on other productive activities such as livelihood generation, education and farming etc. Women were also able to get more involved in social activities due to reduced travel to collect firewood.
- This initiative also contributed towards **reduction in indoor air pollution and associated health hazards**. While 77.4% (n=266) respondents felt a significant reduction of smoke, 97.4% (n=266) respondents confirmed improving health of women in their households.
- 98.5% (n=266) respondents specified the **decrease in their household expenses on cooking fuel** due to reduced consumption. Besides, an opportunity was created for community members (especially local women) to earn income by associating with this project as village monitors.
- 95.9%(n=266) of the respondents were satisfied with the durability and portability of the cookstove as it is easier to use.

2. Breathing Space Improved Cooking Stoves Programme in Ganjam

- This project has efficiently **integrated the adoption and use of cookstoves** among the beneficiaries as 94% (n=269) respondents confirmed its utilisation.
- 57% respondents (n=269) reported **reduction in the waste generation from the cookstoves**, making it more efficient to use when compared with the traditional cookstoves.
- This intervention has **contributed towards reducing the cooking time**, allowing the beneficiaries to have leisure time for themselves and for other household chores. Some of the respondents also indicated decrease in their expenditure due to reduced consumption of wood.
- Beneficiaries (86%, n=269) felt that the **cookstoves provides them with safe cooking** as it has stable base, heath resistant handles and a secure cooking surface, which minimises the risk of accidents.

3. Breathing Space Improved Cooking Stoves Programme in Satara





- 96% respondents (n=269) relied on traditional chulhas (fired by wood) as the primary source of cooking before this project. New cookstoves provided use less wood and emit less smoke due to enhanced thermal efficiency.
- 94% respondents (n=269) confirmed that this intervention has led to an improvement in the indoor air quality, translating into health benefits, especially for the women in the household.
- The project also positively contributed towards reduced cost of fuelwood and cooking time, enabling community members to focus on social activities.
- **99% respondents** (n=269) agreed that **women within their community have been empowered** through engagement in social activities and increased involvement in decision-making.
- 87% respondents (n=269) were satisfied with the durability of the cookstoves. Majority of the respondents were still using the cookstoves at the time of the survey which indicates high adoption rate amongst the beneficiaries and sustained benefits from the project.

Theme 5: Arts & Culture

#	Overview of CSR Project under Assessment	Project Location	Implementation Mechanism	Total Beneficiaries	Total Spent	Quantitative Sample for the Study
1.	Provide infrastructure for the construction of Museum of Art and Photography	Bengaluru, Karnataka	Art and Photography Foundation (Implementation Partner)	-	INR 7.10 Crores	NA ¹¹

- 1. Provide infrastructure for the construction of Museum of Art and Photography
 - MAP transitioned its programmes online to reach digital audiences. In the digital transformation innovations like 3D holography, photo lamping, 360-degree artwork, the Bloomberg Connect app, and AR filters have made art accessible to diverse communities, enhanced visitor engagement and promoted inclusivity.
 - Local artists were empowered by providing them a platform to showcase their work in the Infosys Foundation Gallery, which offer free access to visitors. The museum's infrastructure, including ramps, lifts, and the incorporation of Braille and sign language integration, also ensured inclusion.
 - International week of deaf programme with sign language interpreters and detailed artwork explanations, engaged 230 participants, including the Deaf community. This activity not only garnered attention but also fostered a more inclusive cultural hub, actively embracing diversity while celebrating the International Day for Sign Language. Initiatives like 'School Group Interactions', 'Make at MAP', and 'Summer at MAP' have provided unique learning opportunities for participants, enhancing educational outreach, and making art accessible and meaningful in various learning environments.

For a complete understanding of findings, IRECS Analysis and recommendations, please refer respective <u>project-specific findings</u>.



¹¹ NA indicates not applicable as it was a qualitative study



3. Methodology for Impact Assessment

3.1. Scope of the Study

Infosys Limited has been engaged in implementing a wide range of CSR initiatives aimed at making a positive impact on communities across the country and contributing to key thematic areas essential for social development. These thematic areas are central to Infosys' overall mission of CSR, as the Company is dedicated to making a meaningful impact in each of them. In line with its CSR commitment, Infosys intends to conduct an independent impact evaluation of its 13 CSR projects and accordingly, it has approached Price Waterhouse Chartered Accountants LLP ("PWCALLP", "PW") to provide support and assistance for an independent review and impact assessment of such Projects. This included reviewing the Key performance indicators (KPIs), as defined by the Management under the framework for implementing the CSR Projects for their outputs, outcomes, and impact. Framework was Inclusiveness, Relevance, Efficiency, Convergence and Sustainability Framework (the 'IRECS'). Recommendations on the Projects' performance was provided for Management's evaluation and consideration.

The scope of work included below activities:

- Understanding the scope and boundary of the CSR Projects to be evaluated and the assistance to be provided.
- Conducting desk review of the documentation provided by the Company and in consultation with the Company's CSR arm Infosys Foundation (the "Foundation") and its implementing partners; and agree with the Management the parameters to be assessed for the Impact Assessment.
- Conducting out the stakeholder mapping for the Company to identify key stakeholder groups to be interacted with during the assessment.
- Based on the above, develop the quantitative/ qualitative questionnaires (as relevant) to be used during the assessment for conducting in-depth interviews, interactions, meetings with the stakeholders and beneficiaries of the CSR Projects.
- For the impact assessment studies, wherever relevant based on the methodology of the study, draw an estimated quantitative sample for survey during the study.
- Data collection through virtual/ in-person interactions (as relevant) based on the questionnaires developed and consultations done.
- Based on the interactions and discussions, conducting analysis of the information and assessment of outcome/impact.
- Developing a report based on the overall findings including the recommendations for Management's consideration.

A quick overview of each of the CSR projects being assessed as a part of the impact assessment is mentioned in the below table:¹²

Table 1: Bird's-Eye View of CSR Projects Under Impact Assessment

#	Name of CSR project under assessment	CSR thematic area	Project location	Implementation mechanism	Total beneficiaries	Project implementation period
1.	Improved Woodstoves in Udaipur- Helping Women and Environment	Sustainability	Udaipur, Rajasthan	Udaipur Urja Initiatives Producer Company Limited (Technical Partner)	15,400 households	FY 2016-2021
2.	Breathing Space Improved Cooking Stoves	Sustainability	Satara, Maharashtra	Envirofit Private limited (Technical Partner)	37,200 households	FY 2016-2023

¹² Source: Project documents as received from Infosys team

19



#	Name of CSR	CSR thematic	Project	Implementation	Total	Project
	project under	area	location	mechanism	beneficiaries	implementation
	assessment					period
	Programme, Satara					
3.	Breathing Space Improved Cooking Stoves Programme, Ganjam	Sustainability	Ganjam, Odisha	Envirofit Private limited (Technical Partner)	37,200 households	FY 2017-2023
4.	Construction of Girls' hostel building at IIIT Dharwad campus	Women Empowerment	Dharwad, Karnataka	Self- implementation with the grant support to IIIT Dharwad	300 Girl students (maximum capacity)	FY 2017-2022
5.	Provide infrastructure for the construction of Museum of Art and Photography	Arts and Culture	Bengaluru, Karnataka	Art and Photography Foundation (Implementation Partner)	-	FY 2020-2023
6.	VidyaGanga	Education	Multiple locations (Andhra Pradesh, Bihar, Jharkhand, Karnataka, Maharashtra, Rajasthan, Tamil Nadu, Uttar Pradesh, Manipur)	eVidyaloka Trust (Implementation Partner)	21.45 lakh children	FY 2020-2023
7.	Construction of multipurpose hall for 200 girls	Women Empowerment	Mysuru, Karnataka	Self- implementation with the grant support to Shaktidhama Trust	200 Girls	FY 2020-2023
8.	Rajya Mahila Okoota (RMO) & Grakoos	Women Empowerment	Raichur & Yadgir, Karnataka and Mahabubnag ar, Telangana	Khushi Trust (Implementation Partner)	6,350 local community members	FY 2019-2022
9.	Kai Hididu Nadesennanu	Education	23 districts, Karnataka	Yuva Brigade (Implementation Partner)	10,000+ students	FY 2021-2022
10.	Covid-19 support to Gandhi Hospital	Healthcare	Secunderaba d, Telangana	Self- implementation with the grant support to Gandhi Hospital	-	FY 2021-2022
11.	Provision of Tablets for 10th and 12th standard students to ensure continuity and performance in	Education	38 districts across Karnataka, Tamil Nadu, & Puducherry	Dhwani Foundation (Implementation partner)	1,300 students	FY 2020-2022





#	Name of CSR project under assessment	CSR thematic area	Project location	Implementation mechanism	Total beneficiaries	Project implementation period
	their studies - 2020-21					
12.	Covid-19 support to Chinmaya Mission Hospital	Healthcare	Bengaluru (Bangalore), Karnataka	Self- implementation with the grant support to Chinmaya Mission Hospital	-	FY 2020-2022
13.	Holistic Village Development by community participation	Women Empowerment	Jhabua and Alirajpur, Madhya Pradesh	Shivganga Samagra Gramvikas Parishad (Implementation partner)	5,170 local community members	FY 2021-22

Kindly note that the information provided is from the project documents as received from Infosys team.

3.2. Detailed Methodology

To assess the impact of CSR projects (as mentioned in Table 1), the PW team undertook an integrated and cohesive approach in consultation with Infosys team. The following step by step approach enabled the research team to assess and evaluate the direct impact on the lives of project beneficiaries and other project stakeholders coming from the marginalised sections of the society:

Figure 3: Overall Approach for Assessing the Impact of CSR Projects



Workstream 1: Engagement Kick-off and Desk Review

The impact assessment was initiated with a kick-off meeting with the project team from Infosys Limited and Infosys Foundation. The meeting was organised to primarily gain a detailed understanding of CSR projects. The team prepared a list of documents required for initiating the impact assessment and shared with the respective project SPOCs. Once the documents were received (i.e., MoUs with the implementing agency, brief of CSR projects etc.), team initiated the desk review of the documents. The preliminary queries in relation to strengthening the understanding of the projects and its assessment were discussed. Infosys team was aligned on the overall approach for undertaking the assessment study.

Workstream 2: Research design and tool development





The research team from PW reviewed and understood the implementation processes for all the projects. The present impact assessment study was guided by the IRECS assessment framework (Figure 5) which was used to provide overall feedback on the efficacy of implementation, as well as the project efficiency in terms of achievement of the desired project outputs with reference to inputs.

Figure 4: IRECS Framework

IRECS is a framework that assesses impact by focusing on evaluating performance of social development projects based on inclusiveness, relevance, effectiveness, convergence, and sustainability aspects. This framework helps in gaining a qualitative understanding of the impact created, stakeholder perception, extent of collaboration with other stakeholders and sustenance of the change. The criteria under IRECS would help in understanding whether:



Post finalising the assessment framework in consultation with the Infosys team, PW initiated the mapping of the stakeholders to draw the sample size for the purpose of impact assessment. Below table provides a broad overview of the sample size for each of CSR projects.

Table 2: Sampling Frame and Research Methodology for the Projects Under Assessment

Project Name	Research	Total No. of	Sample
	Methodology	Beneficiaries	Size*
Project 1: Improved Woodstoves in Udaipur- Helping Women and Environment	Mixed method	15,400 households	266

22





Notes: *Sample calculated using 90% Confidence Interval and 5% Margin of Error, subject to the availability of the stakeholders and mobilization support from Infosys and implementation partners. -- Qualitative study

Automative study A Sample for these projects were changed due to the change in universe/ number of beneficiaries, same has been discussed with Infosys team.

The key stakeholders' groups were identified for each of the projects to undertake the guantitative and gualitative interactions with the project stakeholders. Post-mapping of the key stakeholder groups in consultation with the Infosys team, PW started developing the research tools for data collection from beneficiaries for all the projects.

Workstream 3: Field visit & data collection

PW team also ensured to sensitise the implementing agencies and Infosys project team on the requirements from impact assessment study and communicate the dates for the field visits. Post finalisation of the field plan, the research team from PW was oriented on the research tools (quantitative and qualitative) and dos and don'ts on the field. Data collection for all CSR projects were conducted during the period of December 2023-January 2024. Project wise research teams were formed to collect data from the field for the respective projects within the stipulated timeline. Once the quantitative and qualitative data was received from the field, data entry and cleaning were carried out.

Workstream 4: Analysis & report writing

After the data entry and data cleaning, the analysis was carried out to arrive at the insightful findings for each of the projects. The draft consolidated report was prepared accordingly, and key findings were discussed with Infosys Limited and Infosys Foundation teams for obtaining their feedback and inputs. PW submitted the final report to Infosys Limited for management's consideration post incorporating the inputs received from the team.

The subsequent sections discuss the detailed project-wise key findings and IRECS analysis based on the desk review and stakeholders interactions carried out for respective CSR project.





4. Project 1: Improved Woodstoves in Udaipur- Helping Women and Environment



In India, traditional cooking methods remain widespread, often due to limited access to clean cooking facilities. There are significant discrepancies in access to clean cooking between urban and rural areas. Compared to rural areas, urban areas have better access to clean cooking. In rural India, people commonly cook with simple mud cookstoves fueled by wood, resulting in combustion and indoor air pollution that causes respiratory and other ailments.

The health implications of household air pollution are severe. When inefficient stoves, solid fuels, and kerosene are used, air pollution is released into the home, increasing the risk of chronic illness for all occupants, especially women and children. Each year, 3.2 million people die prematurely from illnesses attributable to the household air pollution caused by the incomplete combustion of solid fuels and kerosene used for cooking.¹³ There have been continuous efforts nationally to enhance access to clean cooking energy through various policies, interventions, and flagship programmes.¹⁴

4.2. About the Project

As part of its Corporate Social Responsibility (CSR) initiative, Infosys Limited has carried out multiple projects to in the field of environment and sustainability. One such CSR project is **"Improved Woodstoves in Udaipur-Helping Women and Environment" with** an objective **to support 15,400 families to access the technology of improved cookstoves (ICS).**¹⁵ A schematic representation of the project specifics is depicted below:



Figure 5: Schematic Representation of Project Specifics

The project was implemented by Udaipur Urja Initiatives Producer Company Limited (UUI) across Kherwara, Girwa, Jhadol, Sarada and Rishabhdev tehsils of Udaipur district.¹⁶ Notably, the selected tehsils fall under the socially marginalised areas of Udaipur district in the state of Rajasthan.

Each project family received two stoves (one of each model). Overall, **15,400 households received both the Smart and Jumbo stoves each**. The project leveraged self-help groups of women and community institution setup in the villages by the UUI team which is in alignment with prevalent government schemes in the country for community development. When receiving the stoves, families were to contribute a token amount to development of funds of their respective community institution and an amount to the implementer for maintenance, monitoring and community governance of the project.¹⁷



¹³ Source: <u>https://www.who.int/news-room/fact-sheets/detail/household-air-pollution-and-health</u>

¹⁴ Source: https://pib.gov.in/PressReleaselframePage.aspx?PRID=1525934

¹⁵ Source: Project documents received from Infosys Foundation

¹⁶ Source: Project documents received from Infosys Foundation

¹⁷ Source: Project documents received from Infosys Foundation

Two model of biomass ICS were selected after necessary demonstrations and pilot testing with the users. The description of the two cookstoves is shared below:

- Greenway Smart Stove: This stove is a single burner high efficiency cookstove. It uses no moving parts, savings in fuel consumption up to 65%, and minimizes harmful emissions of CO, CO2, and particulate matter (PM). The stove delivers convenient cooking without any major need of fuel processing or significant change in cooking habits. It operates on all solid fuels as wood, agro waste, etc.
- Greenway Jumbo Stove: It builds upon the features of the Smart Stove in a bigger size and greater loading capacity. The stove produces about 70% less smoke and uses 65% less fuel than traditional cookstoves.

4.3. Method of Impact Assessment

Guided by the overall IRECS framework, the study took a cohesive approach to assess the impact of the project.

PW team initiated the assignment by conducting a kick-off meeting with the Infosys team. The meeting was conducted to discuss the overall scope of work, align on the expectations of the Infosys foundation team from the assessment, and to gain a detailed understanding on the project. Post the meeting, PW team received the following project related documents from Infosys team:

- Memorandum of Understanding (MoU) signed between Infosys Limited and Udaipur Urja Initiatives
- List of project beneficiaries

A desk review based on the documents received was undertaken by the PW team to augment the understanding of the project, design the assessment framework and finalise the



Figure 6: Project Location

key stakeholders for the interactions. To further understand the overall mechanism of how the programme is being implemented on ground, PW team understood the implementation processes from the implementing partner.

In consultation with Infosys, **mixed methodology** (quantitative and qualitative research methodologies) was deployed to undertake the impact assessment study. The quantitative study focused on generating insights and evidence related to the current and expected impact. The qualitative data was leveraged to translate observations, perspectives, and experiences into valuable understandings of the actual impact. In addition to quantitative research techniques such as **surveys**, qualitative research methods like **In-depth Interviews (IDIs) were also deployed**.

After development of the methodology, key stakeholders were identified, and data collection tools were developed for each stakeholder.

Based on the data shared by Infosys team, it was understood that 15,400 beneficiary households have been covered under the project. Hence, a sample of 266 was estimated at 90% confidence level and 5% margin of error. Four out of five tehsils were selected based on (i) Geographical spread, (ii) Number of beneficiaries (iii) Number of villages. **The sampling distribution for quantitative survey was as follows:**





Table 3: Distribution	of qua	ntitative	sample	across	villages
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District	Taluka	Village	Sample
Udaipur	Kherwara	Sulai	48
		Balicha	46
		Pahada	41
	Girwa	Saru	19
		Alsigarh	16
		Chanawada	15
	Jhadol	Karel	30
		Garanwas	20
		Nichli Sigri	19
	Sarada	Krishnapura	6
		Kunda Vali	4
		Bori	2
Total			266

The stakeholders identified for the qualitative interaction is depicted below:

Figure 7: Qualitative Research Design for the Study



Once the stakeholders were identified and research tools prepared, quantitative survey for the selected sample with project beneficiaries was initiated along with site visit to villages. Total twelve interactions were completed during the site visit whereas two interactions were conducted virtually.

The data collected through the quantitative survey and the responses from the qualitative interactions were then analysed along with desk research findings to understand the impact of the project as depicted in the next section on 'Analysis & Findings'.





4.4. Analysis & Findings

Based on the data collected from quantitative survey and our qualitative interactions with project stakeholders along with desk review of the project documents provided by Infosys team, research team has summarised the findings of the study as below:

4.4.1. Challenges Before the Project

Prior to the intervention the community grappled with challenges imposed by traditional cooking methods on a daily basis. Basis the discussion with the implementing partner and the respondents following challenges have been enumerated as below:

- Indoor air pollution and associated health risks: Household cooking is pre-dominantly managed by women in these communities, thereby enduring heightened exposure to harmful smoke and gases, leading to respiratory ailments and eye irritation. Children, often cradled in their mothers' lap during meal preparation, were also subject to equivalent detrimental effects and risk of fire accidents, jeopardising their health.
- Wood collection and financial burden: The traditional methods required relatively more wood to fuel the cooking contributing to environmental degradation and deforestation. Procuring firewood also entailed long distance walks for the women, amplifying women drudgery. Need for purchasing wood exacerbated existing financial burden.
- **Time constraints:** Traditional cooking methods needed prolonged time and attention leaving no room for other household chores and leisure time for women of these households. Due to their open-air structure, they needed constant attention and had to be re-ignited multiple times slowing down the cooking process.
- Limited Mobility and Infrastructure: Mud stoves have to be established in a particular space confining the cooking to specific household locations, impeding flexibility of use at preferred location within the household. Whenever settled inside the homes, for instance, during rainy season, these mud stoves accumulated substantial quantity of soot damaging the ceilings and increased need for constant upkeep and maintenance.

4.4.2. Summary of the Impact Created

This section of the report highlights the summary of the key findings of the impact assessment study. It provides a basis for recommendations for the project.

1. Profile of the respondents

Below analysis presents the profile of the respondents based on various demographic indicators including age, gender and economic profile depicted in below representations:

More than the half (52.6%) (n=266) of the respondents surveyed as a part of this project were women.
 41.7% (n=266) of the respondents fall into the 31-40 years age criteria whereas 27.4% (n=266) of the respondents fall in the 41-50 years range as depicted in Figure 10.

Figure 8 : Gender distribution of the respondents (n=266)







28



- - Majority of the respondents (75.9%) reported agriculture labour/farming on own land as their primary occupation (n=266) (Figure 11).

Figure 10 : Occupation of the respondents (n=266)



- 70.7% (n=266) of the respondents had below poverty line (BPL) card. Further, 38.7% (n=266) of the respondents have reported their annual household income to fall into the range of 10,000-30,000 followed by 24.4% (n=266) of the respondents in the range of 30,001-50,000.
- More than 5 members in the family were reported by 74.4% (n=266) households whereas 13.9% (n=266) households reported of more than 7 members in the family indicating a potentially high demand for cooking resources among such groups.

2. Effective Utilisation of Cookstoves

- 100% of the respondents (n=266) reported using cookstoves provided under the project. Before receiving the stoves, respondents shared that traditional cooking methods with "mitti chulha" made up of mud were widely used. Data from the survey reaffirmed this where 98.9% (n=266) respondents reported using the traditional chulha (open fire stove) for cooking and only 1.1% (n=266) reported using the gas stove for cooking.
- 61.5% (n=266) of the respondents were aware about this project through community meetings and 35.5% through awareness programme. Awareness about the project was disseminated through various channels as depicted in the figure below.



Figure 11: Awareness of project through different channels (n=266)

Multiple choice question, and total may not add up to 100%.

• Further, during discussions, it was observed wood has been utilised as primary source of cooking fuel before and after the introduction of cookstoves. However, the amount of wood needed reduced substantially by using the cookstoves.





3. Reduced time on cooking

During discussion when enquired about the time saved for cooking, the responses of the beneficiaries varied from saving 30 minutes to saving 40-50 minutes (per meal in a day). The reduction in cooking time was also reiterated by the respondents during survey as 52.9% (n=261) of the respondents were saving 15-30 minutes per day due to the new stoves. (Refer Figure 13)



Figure 12: Average reduced time on cooking tasks (n=261)

The time saved due to the introduction of cookstoves was utilised in various daily activities like farming, taking care of children, taking care of livestock, etc. as noted during discussions with the beneficiaries. This was corroborated from the quantitative survey where 79.3% (n=261) of the respondents felt an increase in time for leisure activities whereas 73.6% (n=261) felt an improved productivity in other household chores. The details of impact on daily activities are covered in the figure below.





Multiple choice question, and total may not add up to 100%.

4. Abatement of health hazards

The traditional cooking method was a primary contributor to indoor air pollution in households and added to
respiratory issues, eye irritation and damage to respiratory organs. The cookstoves were extremely
beneficial in reducing the impact of such health hazards drastically. 77.4% (n=266) of the
respondents felt a significant reduction of smoke and gases being released into the air whereas
21.8% (n=266) felt a moderate reduction. Distribution of responses on the reduced smoke and gases
released while cooking can be seen in the depiction below:







Figure 14: Change in the amount of smoke and gases released into the air (n=266)

During interaction with the implementing partner representative, the team noted that emissions have reduced which has had a positive impact on the women's health. 97.4%(n=266) of the respondents stated that the cookstoves have resulted in improved health of women in the household. Respondents' opinion on specific changes pertaining to health aspects can be noted in figure 16 below.



Figure 15: Changes in health aspect due to the cookstove (n=266)

Multiple choice question, and total may not add up to 100%.

5. Financial benefits of cookstoves

- It was observed that since using the cookstoves was decrease in expenses related to cooking fuel. During the interactions, respondents shared that some families had to buy wood, and some walked and gathered wood from nearby forests for cooking fuel consumption. It was also noted that purchase of wood used to increase during the rainy season. This was due to limited availability of dry wood for cooking during this season. This expense related to buying wood was no longer required with cookstoves.
 - Earlier 20-30 kg of wood was consumed in cooking needs of 5 days which now could support cooking for 10 days. Especially, during the rainy season (around 4 months), the wood had to be purchased at a price of INR 1,200 for 80-100 kg of firewood. Small twigs can be used in the cookstoves that are found easily, thereby reducing the effort in collection of the fuel and need to walk distances to collect them. Even stalk from the lentil plant can be utilised as fuel in these cookstoves and so half of the cost is saved.

-A woman beneficiary, Sulai village 🗦

 98.5% (n=266) respondents stated a decrease in household expenses related to cooking fuel. Moreover, decrease in average monthly fuel expenditure illustrated below:





Figure 16: Average monthly fuel expenditure decrease (n=262)



 The saved expenses due to the use of cookstoves was utilised by the respondents for different purposes as depicted in the figure below:



Figure 17 : Utilisation of saved expenses due to cookstove (n=262)

Multiple choice question, and total may not add up to 100%.

- As per the discussion with the implementing partner representative, the project also provided an
 opportunity for local women from tribal households to earn income by being a part of the project as
 village monitors. The village monitors were given INR 80 per household for the distribution of the
 cookstoves as a onetime remuneration and were remunerated a sum of INR 18 per household per
 month for the monitoring of the usage of cookstoves.
- The positive changes in health aspects in the household has also resulted in monthly savings on health expenses with 33.1%(n=266) of the respondents reporting monthly savings falling in the range of INR 301 to INR 500 and 18.8%(n=266) of the respondents reporting the savings to be in the range of INR 501 to INR 1000.

6. Impact on Women of Household

The women being in direct contact with the stove were major focus of the project. During the interaction with implementing partner representative, the research team was informed that the time spent on collecting firewood has reduced and the drudgery of the women has gone down. In the quantitative survey, 93.6% (n=266) of the respondents reported that women of the home have experienced decrease in time spent in the kitchen, enabling more involvement in work/ social activities outside the home. Further details have been illustrated in the figure below.





Figure 18: Positive impact of the project on women at home (n=266)



Multiple choice question, and total may not add up to 100%.

7. Portability, safety, and ease of usage

Both the types of cookstoves utilise stainless steel combustion chamber. This was observed during
discussions with the beneficiaries as most of the respondents didn't face any issues related to these
cookstoves more than once in the long duration of the project. 95.9%(n=266) of the respondents were
satisfied with the durability of the cookstove. Moreover, 85% (n=266) felt that the cookstoves have
significantly enhanced the safety of cooking in their household whereas 15% (n=266) felt that safety of
cooking has been enhanced to some extent in their household.

Figure 19: Distribution of respondents' satisfaction towards durability of the stove (n=266)



• The respondents shared that the cookstoves are portable which makes them easier to use indoor and outdoor.

Figure 20: Indoor utilisation of Jumbo and Smart cookstove



Figure 21: Outdoor utilisation of Jumbo and Smart cookstove







- Basis the discussion with implementing partner, team noted that thermal efficiency of the cookstoves is approximately 37.12%.
- As per interactions with the beneficiaries, to improve the durability and the efficiency of the cookstoves, they were trained on utilisation, maintenance and taking care of the cookstoves. This was initiated with an orientation session during the distribution with training the beneficiaries on the kind of wood to be utilised during the burning of stove.
- This was also reaffirmed during discussion with the respondents as most of them had attended this session in their community meetings. 86.5%(n=266) of the respondents had received the training on maintaining and taking care of the stove. Further, when enquired as to who provided training on maintaining and taking care of the stoves, 69.1% (n=230) respondents reported project staff from implementing partner whereas 22.6% reported the community leaders to have provided the training. (Refer Figure 23)



Figure 22: Source of maintenance training received (n=230)

41.4%(n=266) of the respondents stated that they experienced issues with the functionality of the cookstove since its installation. When probed on the redressal mechanism, 45.5%(n=110) of the respondents self-repaired, 33.6% (n=110) sought help of the community members and 17.3% (n=110) contacted the project support to address the issues faced. Additionally, during discussions it was noted that the community leaders further escalated the issue to the "village monitor" of the project team who collected the stoves and got it fixed/replaced and provided it back to the beneficiaries.



Figure 23: Addressal mechanism used by respondents (n=110)

• The training was effective for the beneficiaries as the data reflects 61.3%(n=266) regularly performed maintenance on the cookstoves whereas 33.5%(n=266) did it occasionally. Additionally, the maintenance support was also provided by the implementation agency for the upkeep and replacements of the stoves. This was corroborated during the interaction with the implementing partner representative. The cookstoves are repaired and sent back to the beneficiaries within ten days. 60.9% (n=266) of the respondents reported of leveraging the maintenance support provided by the implementation agency.



Figure 24: Frequency of performed maintenance on the cookstove (n=266)

Figure 25: Source of maintenance support received for the cookstove (n=266)



- Moreover, when enquired about the satisfaction, it was observed from the data that 95.9%(n=266) of the
 respondents who utilised maintenance services were satisfied with the services.
- 9. Overall impact of the cookstoves on beneficiaries
- The respondents were satisfied with project's impact on community as most of the households locally had these stoves in utilisation due to users recommending to each other after experiencing the benefits of the cookstove. One of the respondents, during discussion, shared that she had suggested the same stove to her married daughter who lives in different village. This is also reflected in the data as 84.6% (n=266) believe the stoves has significantly transformed their community whereas 11.3% (n=266) believe it has led to moderate transformation. Further, all the respondents confirmed encouraging other non-users to opt for cookstoves and transition from traditional cooking methods due to its benefits.
- The respondents stated their point of view on the reasons for recommending the cookstove to others, where most of them (90.8%, n=266) reported improved health benefits as the reason. (Refer Figure 27)



Figure 26 : Reason for suggesting the projects to other (n=266)

Multiple choice question, and total may not add up to 100%.

4.4.3. IRECS Analysis

Based on interactions with key stakeholders and desk review of the project report, **impact of the project has also been assessed on the IRECS (Inclusiveness, Relevance, Effectiveness, Convergence, Sustainability) framework parameters.** The IRECS analysis summary has been presented in below table:

Table 4: IRECS Analysis

Parameter	Assessment from Study
Inclusiveness	 Inclusivity is a key component of the programme as the 70.7% (n=266) of the respondents have reported to have a BPL card



Parameter	Assessment from Study		
	 41.7% (n=266) of the respondents fall into the 31-40 years age criteria whereas 27.4% (n=266) of the respondents fall in the 41-50 years. Additionally, 12.8% (n=266) of the respondents fall under the <30 years age whereas 18% (n=266) fall under the >50 years age span. 		
	 In terms of gender distribution, 52.6% (n=266) of the respondents are women. The remaining 47.4% (n=266) are male respondents. 		
Relevance	• Due to 70.7% of the respondents falling in the BPL criteria, 97.4% (n=266) of the respondents were using wood as the primary source of fuel for cooking . The targeted community areas for implementing cookstoves were appropriate to create positive impact.		
	• 98.9% (n=266) of the respondents reported of using the traditional chulha (open fire stove) for cooking. The project has positively catered to the beneficiaries and has resulted in the switch from traditional to cookstove as 100% (n=266) of the respondents were presently using the cookstove.		
	 It was reported that the beneficiaries earlier faced multiple challenges due to traditional chulha like more consumption of wood, more smoke, soot, and indoor air pollution, health issues like coughing and irritation of eyes, fixed cookstove at one place, maintaining the flame. Due to all of these issues people preferred the cookstove making the project relevant for the community members. 		
Effectiveness	 The project has effectively catered to the women of the households as 93.6% (n=266) experienced decrease in time spent in the kitchen, enabling more involvement in work/ social activities outside the home, 85.7% (n=266) of the respondents felt that the women of the home experienced reduced need to travel long distances to collect firewood. Further, 97.4% (n=266) of the respondents have reported that the stoves have resulted in improved health of the women in the household. 		
	 The indoor pollution while cooking has been reduced as 98.5% (n=266) of the respondents reported of noticing changes in indoor (within house premise) air quality since using the cookstove. 77.4% (n=266) of the respondents felt a significant reduction of smoke and gases being released into the air. 		
	• The reduction in indoor polluted air has resulted in better health conditions as 88.7% (n=266) of the respondents felt that there are fewer respiratory diseases , 79.7% (n=266) experienced reduction in itching of eyes , 77.4% (n=266) reported less coughing and 59.8% (n=266) felt the stove has led to more hygienic conditions .		
	 The project has also impacted the beneficiaries financially as 98.5% (n=266) of the beneficiaries reported decrease in household expenses related to cooking fuel which has been further utilised as 72.5% (n=262) of the beneficiaries have steered these savings towards education of children and healthcare. 		
	 The project also provided an opportunity for local women from tribal households to earn income by being a part of the project as village monitors. 		




Parameter	Assessment from Study
Convergence	 The project has functioned on the self-help group model made up in the community by the UUI's team in the village. This aligns with the Deendayal Antyodaya Yojana-National Rural Livelihood Mission (DAY-NRLM) which promotes building strong institutions such as Self-Help Groups (SHGs) for the poor, particularly women, and enabling these institutions to access a range of financial services and livelihoods.
	• The project has successfully aligned with The Unnat Chulha Abhiyan programme of central government for promotion of biomass cook stove in the country for providing a clean cooking energy solution with a view to reduce consumption of fuel wood with higher efficiency and low emissions.
Sustainability	• The project has fostered community capacity building on effective way of utilising and maintaining the cookstoves through training . With the potent durability of the cookstoves the project will cater to the community in future for a respectable amount of time.

4.5. Alignment to the Infosys Limited's CSR policy, and UN SDGs

The project implemented is in alignment with Infosys Limited's CSR policy, which mentions, environment sustainability as one of the CSR focus areas for Infosys Limited. The project also contributes to relevant Sustainable Development Goals: SDG 3- Good Health and Well-being, SDG 4- Quality Education, SDG 7-Affordable and Clean Energy, SDG 8- Decent Work and Economic Growth and SDG 13- Climate action.¹⁸











4.6. Study Limitation

 Limited progress reporting: There was limited progress reporting and documentation undertaken by Udaipur Urja Initiatives Producer Co. Ltd with Infosys. This led to limited documentation on the monitoring of the project and limited view for evaluation.

4.7. Case Stories

Change story: Embers of Progress: Empowering Women through efficient Cooking

In a rural community nestled among the hills and fields, a mother and daughter, accustomed to cooking together over a traditional open stove (mitti chulha), found their lives transformed by the introduction of cookstoves. Initially, their household chores were burdened by the thick smoke and prolonged cooking times associated with the traditional cooking method. The mother often suffered from coughing and irritated eyes, while their home bore the tell-tale signs of soot on the ceiling.

Upon learning about the cookstove project through their neighbourhood women's group, formed under Udaipur Urja Initiatives' guidance, hope ignited within the family. With the orientation provided by the community institution, they eagerly embraced the new technology, unaware of the profound impact it would have on their daily lives.



¹⁸ Source: <u>https://sdgs.un.org/goals</u>



As the cookstoves replaced the old chulhas, the household experienced a remarkable transformation. The reduction in smoke emissions brought relief to the families' respiratory health, putting an end to coughing and eye irritation. With time reclaimed from cooking chores, the mother took the opportunity engage in farming activities. She emerged as a pillar of strength in contributing to the family's economic well-being. Meanwhile, the daughter's increased focus on education promised a brighter future, fueled by her newfound time and energy.

As the family's story unfolded, it became clear that the impact of the cookstove project extended far beyond the walls of their home. Empowered by healthier living conditions and enhanced productivity, they emerged as agents of change within their community, inspiring others to embrace innovation and pursue opportunities for a better tomorrow. In the face of adversity, the project has proved to be a catalyst for transformation, illuminating a path toward sustainable development and empowered livelihoods.





5. Project 2: Breathing Space Improved Cooking Stoves Programme, Satara



In rural India, cooking with traditional chullhas is a deeply ingrained practice that has been passed down through generations. These chullhas consist of a simple clay or mud structure, often placed outdoors or in a dedicated cooking area within the household. Fueled primarily by biomass such as wood, crop residues, or dung, chullhas provide a basic means of preparing meals for millions of households across the country.

However, cooking with traditional chullhas poses significant challenges, including high levels of indoor air pollution and inefficient use of fuel, leading to health issues and environmental degradation. Each year, 3.2 million people die prematurely from illnesses attributable to the household air pollution caused by the incomplete combustion of solid fuels and kerosene used for cooking.¹⁹ Despite these challenges, chullhas remain a central fixture of rural Indian households, reflecting the cultural significance and practical necessity of traditional cooking methods.

5.2. About the Project

Infosys Limited (Infosys) has been undertaking various CSR projects with an aim to address specific environmental and health related challenges emanating from the use of traditional chullhas. One such CSR project is **'Breathing Space Improved Cooking Stoves Programme - Satara'** which was undertaken during FY 2016 – 23. The objective of this project is to contribute towards solving the indoor air pollution problem and reduce greenhouse gas emissions.

To implement this project, Infosys Limited engaged Envirofit India Private Limited (Envirofit) as a technical partner **to install 37,200 units of 'Envirofit Stove-PCS 1' models across 37,200 households**. This project was carried out in Satara district of Maharashtra covering 10 talukas (626 villages) to benefit a total of 37,200 beneficiaries.²⁰



Figure 27: Schematic Representation of Project Specifics

²⁰ Source: Project documents received by Infosys



¹⁹ Source: <u>https://www.who.int/news-room/fact-sheets/detail/household-air-pollution-and-health</u>

PW followed a structured and consultative approach to undertake the assessment. The research team initiated the process with a **kick-off meeting with the Infosys team** to gain an understanding on the nature of support provided under the project and further align on any added requirements for commencing the assessment. Following the meeting, PW team received project related documents from Infosys team which consisted of the following:

- Memorandum of Understanding (MoU) signed between Infosys Limited and Envirofit
- Final beneficiaries list and beneficiary map
- Project update report

Figure 28 : Project Location (Satara District)



Based on the information gathered at the kick-off meeting and from the received documents, the research team undertook the project's desk review. This helped in finalising the key stakeholders for the interactions and developing an assessment framework. The team also initiated creation of customised **qualitative and quantitative research tools** for gathering information and assessing the project's impact.

Based on the preliminary assessment of the depth of the programme activities and in consultation with Infosys team, a **mixed method approach** (comprising of both quantitative and qualitative research methodologies) was deployed to undertake the impact assessment study. The quantitative study focused on generating insights and evidence related to the current and expected impact. The qualitative data was leveraged to translate observations, perspectives, and experiences into valuable understandings of the actual impact. In addition to quantitative research techniques such as **surveys**, qualitative research methods like **In-depth Interviews (IDIs) were also deployed**.

Post the identification of key stakeholders for discussion and development of tailored tools, the sample for the quantitative study to be undertaken was finalised. The total quantitative sample covered as part of the impact study was **269**. This sample size was calculated using a **90% confidence level and a 5% margin of error**. Since this project was implemented a few years back, it was challenging to mobilise the beneficiaries. Hence, convenient sampling technique was used to distribute the sample of 269 among the top 4 talukas and 11 villages with maximum beneficiaries. Below table provides an overview of the distribution of sample size:

District	Taluka	Village	Sample size
Satara	Jaoli	Dhondewadi	17
		Dare BK	13
	Wai	Kondhavale	15
		Jambhali	15
	Phaltan	Jinti	36
		Phadtarwadi	35
		Kapshi	36
	Man	Wavarhire	27

Table 5: Quantitative Sample Distribution across Satara District

District	Taluka	Village	Sample size
		Dahiwadi	24
		Shingnapur	24
		Mohi	27

Figure 30 provides an overview of the locations covered for conducting both qualitative and quantitative interactions. These locations (talukas) were finalised in coordination with the technical partner to ensure the availability and maximum mobilisation of the stakeholders during the data collection process. The stakeholders identified for the qualitative interaction are depicted in Figure 31:

Figure 29 : Talukas Covered during the Survey

Total



269



After the completion of data collection, team carried out data entry, data cleaning, and analysis to arrive at the key insights from the impact assessment study. Responses were then analysed along with corroboration with secondary/desk research findings to arrive at detailed findings as depicted in the next section on <u>Analysis & Findings</u>.

5.4. Analysis & Findings

This section provides an overview of key findings emerged from the discussions with the key stakeholders:

5.4.1. Challenges before the Project

- The local community in Satara faced several difficulties because of their over-reliance on traditional cookstoves for cooking, including high levels of indoor air pollution that caused respiratory issues, eye irritation, and throat-related problems like choking and coughing. Due to their primary role in meal preparation and increased exposure to smoke from cooking on traditional cookstoves, women were particularly vulnerable to these issues.
- It was further noted that **buying firewood as fuel for cooking was not affordable** to the community members as most of them belonged to low earning income group.
- Another challenge was gathering wood from the forests, as it was time-consuming and labour-intensive
 activity. It affected the health and well-being of the women putting them in a condition of constant fatigue
 and leaving no time for any other personal or social activities. Further, there were issues pertaining to
 injuries due to fire accidents and mobility of the traditional chulhas.

5.4.2. Summary of the Impact Created

a. Profile of the Respondents:

This section discusses the socio-demographic profile of 269 beneficiaries (n=269) based on the quantitative interactions carried out with them. It was noted that:

- 56% of the respondents were males whereas 44% were women, indicating that project has benefitted both men and women.
- The study has included respondents across the different age groups to gauge the impact of this project.
 38% of the respondents (n=269) were in the age group of 41-50 years along with 30% representation from the age group of more than 50 years. This indicates a representation of the older age group individuals in the survey. As depicted in Figure 33, this diverse age distribution reflects that the project has been inclusive and has aimed at empowering and facilitating holistic development across all age groups.

Figure 31 : Gender Distribution of the Respondents (n=269)

Figure 32 : Age Distribution of the Respondents (n=269)



- More than 95% of the respondents (n=269) stated that they belonged to the below poverty line (BPL) families. This indicates that project has reached out to the underserved section of the society.
- 32% of the respondents (n=269) have completed class 10th and above (Figure 34).

Figure 33 : Highest Levels of Formal Education of the Respondents (n=269)



• A majority of the respondents (51.3%, n=269) are involved in farming or agricultural labour, evidencing **dependence of the community on agriculture** (Figure 35).



Figure 34 : Occupation of the respondents (n=269)



- During the survey, 59% of the respondents (n=269) stated that their annual income ranged from INR 10,000/- to INR 30,000/-. This was followed by 19% respondents who stated having an income of less than INR 10,000/- (Figure 36). This highlights the fact that this project focuses on individuals from the low-income strata of the society and provides means to empower them financially and promote inclusiveness in providing access to clean energy.
- 85.2% of respondents (n=269) stated that they live in a household comprising of more than 5
 members, with 77% stating that the household consists of between 5-7 members (Figure 37). This
 indicates that the cooking needs of such households would be high, which would in turn lead to need
 of an additional cookstove with their existing traditional chullhas. The project caters to this specific
 need as well.



b. Increased Adoption and Positive Change in the Behaviour of Respondents:

- 99.3% of the respondents (n=269) stated that they were aware that the support under the project was funded by Infosys Limited. On probing further, team noted that:
 - 57% (n=267) were made aware through community meetings held within their villages, indicating that the project was community driven.
 - 31% were made aware through door-to-door campaigns from local representatives.





Figure 37 : Source of Awareness (n=267)



Multiple choice question, total may not add upto 100%

 91% of the respondents (n=269) stated that while receiving the cookstoves, they were also provided with trainings on environmental impact of using these cookstoves. When probed further on the modules covered as part of the training, majority of these respondents (69%, n=244) stated that they were made aware of the general benefits and impact of using these cookstoves. Figure 38 : Topics of Training (n=244)



During the survey, 90% of the adopting improved wood wood wood managemen respondents (n=269) agreed that they cooking stoves practices other than using the cookstoves since receiving training. This behavioural change may be attributed to the project and its activities.

c. Integration and Adoption of Clean Energy:

- Wood in traditional chullhas was the most common type of fuel used for cooking prior to the project as reported by 96% of the respondents (n=269).
- 4% of respondents (n=269) stated that they used either charcoal or LPG for cooking purpose. On probing further, the respondents stated that the low usage of charcoal was due to issues pertaining to affordability. On the other hand, LPG was in limited use due to lack of availability. Wood, on the other hand was most readily available source of fuel.
- 75% of the respondents (n=269) currently use the cookstoves provided under this project. This
 indicates widespread adoption of the cookstoves and a substantial shift from the traditional
 cookstoves which pose health hazards and consume a lot of wood.
- Remaining 25% (i.e., total 67 respondents) reported that they have stopped using the cookstoves. 80% respondents (n=67) reported that these cookstoves have stopped working and could not be repaired. In some case, it was reported that the cookstoves required additional maintenance cost to be borne by the user, which made them switch back to the convenient option of using the traditional chullhas.

"We know the importance and benefits of using this cookstove. However, once it stops working, getting it repaired is a big challenge. There is a recurring cost involved as well to get the maintenance of the cookstove done. Hence, we have stopped using it and have switched back to the traditional mud chullha."

As narrated by a project beneficiary during field interactions





- On being enguired about the changes observed in the amount of waste generated from cooking on the cookstoves, 79% (n=269) of the respondents stated that there has been reduction in the amount of waste being generated due to accumulation of large amounts of wood and ash within the household.
- Further, close to 12% of the respondents (n=269) reported an increase in the amount of waste being generated. As per the interaction with the beneficiaries, one of the primary reasons was the improper usage which led to incidences of spilling of food and further resulting into waste generation. (Figure 40)

d. Overall Impact of using Cookstove

- Basis the discussion with technical partner, • team noted that thermal efficiency²¹ of the cookstoves is approximately 37%. This translates into less fuel consumption and overall reduction in the cooking time.
- 80% (n=269) stated that a major impact of • using the cookstoves has been the reduced cost of the fuelwood. Further, around 71% of the respondents stated that using the cookstoves have resulted in saving cooking time. This could be attributed to the fact that as compared to the current cookstoves, using traditional cookstoves often required elaborate preparations before starting the cooking process. Saving time on cooking has also led to increased participation of community members in community events and has enhanced their position within the community as a decision maker. This was also corroborated through the survey findings where 7% of the respondents agreed with this observation. 30% of the respondents agreed that there has been a positive impact in their health, especially pertaining to respiratory problems and eye irritation issues. (Figure 41)
- 70% (n=269) stated that they have Participation in experienced decrease in the frequency to community initiatives collect firewood from long distance which has further contributed to reduced time, resulting in spare time to rest. 28% of the respondents thus reported an increase of women's participation in initiatives within their communities. (Figure 42)

Figure 39 : Impact on Waste Generation due to Usage of Cookstoves (n=269)







Multiple choice question. Total may not add upto 100%

Figure 41 : Impact of Project on Women (n=269)



Multiple choice question. Total may not add upto 100%

²¹ It expresses the fraction of heat that becomes useful work.



Figure 42 : Reduction in Amount of Smoke (n=269)



96% of the respondents (n=269) stated that these cookstoves has led to an improvement in the indoor airquality. Also, almost 94% of the respondents (n=269) agreed that there has been a reduction in the amount of smoke and gases in air, which translates to better indoor environment and overall health and wellbeing of the household. (Figure 43)

• Further, 74% of the respondents

(n=269) reported that there has been an improvement in health of women within their households showcasing that consistent use of cookstoves has a positive impact on a large proportion of the beneficiary household. This is also corroborated with the finding on low smoke being emitted through these cookstoves.

"Earlier, the women within our household who were engaged in cooking would often complaint of irritation in eyes due to constant smoke from the chullhas. The smoke would also lead to constant coughing and throat infection. However, since we have switched to the cookstoves provided under the project, there has been a marked change in their health."

As narrated by a project beneficiary

 During the interactions, research team noted that changes in health aspects are mainly around fewer instances of itching eyes, fewer respiratory diseases, and less coughing. The most prominent health benefit has been the less instances of itchy eyes (81%, n=269). (Figure 44)



Figure 43 : Health Benefits of using Cookstoves (n=269)

Multiple choice question. Total may not add upto 100%

f. Enabling Community Members to Effectively Utilise the Time Saved:

• Time saved by community members indicates the effectiveness of the project. It evidences the objective that the project catered to easing the life of the women members (who were primarily responsible for cooking) within the households. The respondents also highlighted that this saved time could be utilised for other household chores or to spend time with family.



It was noted that 65% of these respondents (n=227) could save 15-30 mins of their daily cooking time, while 28% respondents could save up to 15 mins of their daily cooking time (Figure 45). The respondents also highlighted that this could vary daily based on the cooking styles and preferences. Further, beneficiaries reported that the time saved was utilization into various activities indicated in Figure 46.

Figure 44 : Daily Time Saved in Cooking (n=227)



Figure 45 : Activities Undertaken with the Time Saved from Cookstove (n=227)

50%

Increased time for

leisure activities



Reduced Expenses on Cooking: g.

63%

Improved productivity

in other household

chores

When enquired about the changes in household expenses related to cooking fuel, 76% of the respondents (n=269) reported that the cost savings on fuel is attributed to the usage of cookstoves whereas 24% of the respondents (n=269) reported no change.

30%

- When asked about the decrease in average monthly fuel expenditure, 67% of these respondents (n=205) reported a reduction of less than INR 1,000, while 33% (n=205) observed a decrease in the range of INR 1,001-3,000 per month. When probed further, the respondents stated that as these cookstoves are designed to cook food efficiently, it leads to reduced fuel consumption and hence the savings are realised.
- The decrease in expenses which beneficiaries save due to the cookstoves was utilised by the respondents in different activities. 66% of the respondents (n=205) reported that the amount is added to their savings, while 60% it for healthcare expenses and 51% utilise it in their children's education to secure their children's future. It was also highlighted during interactions with the beneficiaries, that this saving also helps them pay off loans and meander through the tough times.



Figure 46 : Utilisation of Savings (n=205)

Multiple choice question. Total may not add upto 100%





Team further probed respondents to understand the overall perception on various parameters of the project and it was analysed that:

 98% of the respondents (n=269) felt improvement in household cooking safety, with 67% stating that the safety has improved significantly and 31% reporting moderate improvement in safety. As per the respondents, this change could be attributed to the design of the cookstove which has a stable base thereby reducing the spillage and burning.

"Safety features in the cookstove are better than a traditional chullha. The stable base, for example helps in reducing wastage and spilling. Also, the insulated handles attached to the cookstove keeps the hand from burning."

As narrated by a project beneficiary during the field interactions

 99% of the respondents (n=269) believed that the project has brought about a transformation within their community with 64% stating that the change has been significant. During the interactions, the beneficiaries highlighted that since using the cookstoves, the community members have witnessed improved health and enhanced awareness around environmental issues. This has also resulted in empowerment, especially among the women within the community due to utilisation of saved time social activities and increased involvement in decision making.

Figure 47 : Impact of Project on Safety during Cooking (n=269)





- 87% (n=269) were satisfied with the durability of the cookstoves provided. Further, 43% (n=269) stated that they have never faced any issues with the functionality of the cookstoves. Of the remaining respondents (57% of 269, i.e., 153) who faced certain issues, 54% (n=153), stated that they have been able to address the issues either by themselves or through help from community members, thereby saving money and time on repairs.
- 89% of respondents who are still using the cookstoves (n=202) reported that they have conducted maintenance activity (at times) for their cookstoves by cleaning the stoves, removing the leftover burned wood, and ashes. 46% stated that they undertake this maintenance regularly.
- Additionally, among respondents who have performed maintenance of the cookstoves, 48% of the
 respondents (n=180) take maintenance support from the maintenance agency (empanelled by
 Envirofit) while 45% and 7% of the respondents (n=180) take support from local repair shop and
 technical partner respectively. This indicates that the maintenance practice of cookstoves plays an
 important role in sustaining cookstoves' functionality.



Figure 49 : Frequency of Maintenance of Cookstoves (n=202)

40%

Figure 50 : Source of Maintenance (n=180)

45%

48%



96% of respondents (n=180) expressed satisfaction with the maintenance services provided by
various vendors/ agencies through Envirofit. It can be inferred that cookstoves were maintained and
serviced whenever required. The positive response indicates that there was a proactive effort in
addressing maintenance needs, which ensured that the cookstoves remained functional and
efficient over time.

Figure 51 : Cookstoves provided under the project



Basis the interactions with the key stakeholders and desk review, **the impact of the project was also assessed on the IRECS framework parameters**. The IRECS analysis summary has been presented in below table:

Table 6: IRECS Analysis

Parameter	Assessment from study
Inclusiveness	 The cookstoves distributed under the project have been able to benefit the women of the household by saving their time and efforts in cooking.
	 95% of the respondents (n=269) belonged to the BPL families and came from the marginalized socio-economic sections of society. Further, there has been inclusion of respondents across different income brackets, with 59% respondents (n=269) reporting an annual income between INR 30,001/- – INR 50,000/
	 The responds also belonged from diverse educational backgrounds with 28% of respondents (n=269) having no formal education.





46%



Parameter	Assessment from study
Relevance	• 96% of the respondents (n=269) were dependant on the traditional cookstoves also known as 'Chulhas' (open-fire stoves) for cooking which posed various challenges such as wastage of fuel, indoor air pollution and possibilities of health hazards.
	• 75% of the respondents (n=269) have stated that they are still using the cookstove provided under the project. The high adoption rate (given the fact that the cookstoves were distributed more than 5 years ago) of the cookstoves highlights the need and preference of households.
Effectiveness	 71% of respondents (n=269) reported that they have experienced reduced cooking time due to the usage of cookstoves which is enabling them to engage in other activities.
	 74% respondents (n=269) agreed that switching to the new cookstoves has had a positive impact on the health of women within their households.
	 This project has contributed to cost savings on fuel providing economic benefits. 76% of the respondents (n=269) reported that the cost savings on fuel is attributed to the usage of cookstoves.
	• 96% of respondents (n=269) stated that after using the cookstove they have experienced improvement in the quality of indoor air, with 94% stating that there has been a reduction in the smoke emitted during the cooking process. This has resulted in a healthier and smoke-free indoor environment.
	 98% respondents (n=269) stated that cooking on these cookstoves is much safer due to the features such as a stable base, which helps in avoiding tilting of the stove spillage of the contents.
Convergence	 The project brings to fruition collaboration between multiple partners such as Envirofit, civil society organisations (providing mobilization support), and local community leaders who helped initiate the process on ground along with Infosys.
	 The project also complements the Government's efforts to reduce consumption of fuel wood with higher efficiency and low emissions through programmes such as "The Unnat Chulha Abhiyan."
Sustainability	• As per the MoU signed, Envirofit had agreed the upkeep and maintenance of cookstoves for a period of 5 years after the distribution of the cookstoves. Given that this period completed, the project could explore establishing tie ups with certain local vendors and nearby repairing shops for ease of maintenance .
	• Additionally, in areas where there is limited scope of tie up with local shops, training can be imparted to the volunteer/ community representatives who can come forward and further train other community members.

5.5. Alignment to the Infosys Limited's CSR policy and the UN SDGs

The project implemented is in alignment with Infosys Limited's CSR policy, which mentions, environment sustainability as one of the CSR focus areas for Infosys Limited. The project also contributes to relevant Sustainable Development Goals: SDG 3- Good Health and Well-being, SDG 4- Quality Education, SDG 7-Affordable and Clean Energy, SDG 8- Decent Work and Economic Growth and SDG 13- Climate action.













5.6. Study Limitation

Challenges in mobilization of project beneficiaries: One of the limitations of the study was related to the
mobilization of project beneficiaries. The survey team faced challenges in finding the target beneficiaries,
as the current on ground field team members who were assisting in mobilization process were new and had
limited association with the project beneficiaries. This led to difficulties in mobilizing participants for
the survey.

5.7. Case Stories

The following case stories have been gathered in conversation with the beneficiaries of the project:

Change story: 1 – Transforming Lives

Babita (name changed) is a homemaker from Phadatarwadi village in Phaltan taluka (Satara district). She has to cook daily for her family of 5 members. Before this project was implemented in 2016, she used the traditional mud chulhas to cook meals 3 times a day. However, due to continuous exposure to smoke, she had developed a chronic cough.

Babita was chosen as one of the beneficiaries for this project after a meeting with the community leaders in her village. She was part of training sessions imparted by the technical support partner in her locality, which made her switch to using these cookstoves. The low smoke from the cookstoves has meant that her coughing has reduced. Further, since the stoves require less fuel to operate, she has been able to save money on fuel as well. This has translated into dispensable cash from which she can get her treatment done and save for her children's education.

After all these years, she is still using the cookstoves, the primary reason being the multitude of benefits that it has. She believes that spending a minimum amount of money on annual maintenance of the equipment can increase its life beyond the 5-year period. She also encourages her fellow community members to keep using these cookstoves.

Change story: 2 – Towards a healthier life

Kumari (name changed) is a resident of Jambhari village in Wai Taluka (Satara district). She comes from a household consisting of 7 members with her mother and herself being responsible for cooking food for the entire family. She stated that before adopting these cookstoves, she and her mother used to struggle due to the smoke that emitted from the traditional chulhas. Her mother is more than 50 years old and hence she struggled even more, especially with the respiratory issues.

However, since using the cookstoves provided under this project, she has witnessed a stark difference in terms of her health. Since the smoke emitted is less, the respiratory issues have subsided considerably within the family.

Further, one of the major changes was the reduced cooking time. She indicates that close to half an hour of time is saved daily on cooking time. This results in spare time, where she can spend more time with the family and rest. The family has also been made aware of the environmental benefits of using the cookstoves and Kumari has been recommending cookstoves to other community members as well.



6. Project 3: Breathing Space Improved Cooking Stoves Programme, Ganjam



In rural India, people generally use basic mud cookstoves fueled by wood for cooking which results in combustion and indoor air pollution (IAP), causing respiratory and other diseases. The produced smoke contains harmful pollutants, posing severe health risks to individuals especially women and children who are primarily responsible for cooking activities. In rural areas, where traditional cookstoves are common, the negative effects are severe due to heavy reliance on these basic cooking methods. The widespread use of traditional cookstoves further worsens health issues, leading to respiratory illnesses, heart problems, and other complications among villagers and subsequently increased expenses on healthcare. Each year, 3.2 million people die prematurely from illnesses attributable to the household air pollution caused by the incomplete combustion of solid fuels and kerosene used for cooking.²²

6.2. About the Project

Infosys Limited (Infosys) is undertaking various CSR projects with an aim to address environmental challenges and enhance the well-being of rural communities. One such CSR project is 'Breathing Space Improved Cooking Stoves Programme' during FY 2017-22 which aims to contribute towards solving the indoor air pollution problem and reduce greenhouse gas emissions.

To implement this project, Infosys Limited engaged Envirofit India Private Limited (Envirofit) as a technical partner **to install 37,200 units of** 'Envirofit Stove-PCS 1' models across **37,200 households**. This project was carried out in Ganjam district of Odisha covering 20 talukas (477 villages) to benefit a total of 37,194 beneficiaries. It was also implemented in Anugul district and Bargarh district, catering 5 beneficiaries and 1 beneficiary respectively.²³ It was noted that Envirofit further engaged Art of Living to mobilise the beneficiaries and take their assistance in distributing the cookstoves.



Figure 52: Schematic Representation of Project Specifics



²² Source: https://www.who.int/news-room/fact-sheets/detail/household-air-pollution-and-health

²³ Source: Project documents received by Infosys

6.2.1. Method of Impact Assessment

Since the project benefitted large number of beneficiaries in Ganjam district, PW conducted the impact assessment study to assess the social impact of this CSR project in Ganjam district (Figure 54). The process began with a **kick-off meeting with the Infosys team** to gain an understanding on the nature of support provided under the project and further align on any added requirements for commencing the assessment. Following the meeting, PW team received project related documents from Infosys team which consisted of the following:

- Memorandum of Understanding (MoU) signed between Infosys Limited and Envirofit
- Final beneficiaries list
- Onsite pictures of events and training

Figure 53: Project Location



PW team then began project's desk review based on the information collected during the kick-off meeting and from the received documents. This helped the team in designing an assessment framework and finalising the key stakeholders for the interactions. Further, the team worked on developing structured **qualitative and quantitative research methodologies** for data collection and evaluating the impact of the project.

In consultation with Infosys, **mixed methodology** (quantitative and qualitative research methodologies) was deployed to undertake the impact assessment study. The quantitative study focused on generating insights and evidence related to the current and expected impact. The qualitative data was leveraged to translate observations, perspectives, and experiences into valuable understandings of the actual impact. In addition to quantitative research techniques such as **surveys**, qualitative research methods like **In-depth Interviews (IDIs) were also deployed**.

After the development of the methodology, key stakeholders were identified and tailored tools were prepared for each stakeholder to guide the interactions with them. The total quantitative sample covered as part of the impact study was **269**. The overall sample size was calculated using a **90% confidence level and a 5% margin of error**. Since this project was implemented a few years back, it was challenging to mobilise the beneficiaries. Hence, team used convenience sampling to further distribute the sample of 269 among the top 4 talukas and 10 villages with maximum beneficiaries. Below table provides an overview of the distribution of sample size:

Table 7: Quantitative Sample Distribution across Ganjam District

District	Taluka	Village	Sample
Ganjam	Beguniapada	Phasi	53
		Burujhuri	31
		Mardakote	23
		Talasara	23
	Jagannathprasad	Adheigan	32
	Digapahandi	Kusapada	20
	Polasara	Kalamba	23



District	Taluka	Village	Sample
		Jakara	24
		Karatuli	17
		Godapalana	23
Total			269

Figure 55 provides an overview of the locations covered for conducting both qualitative and quantitative interactions. These locations (talukas) were finalised in coordination with the technical partner to ensure the availability and ease of mobility for stakeholders participating in the data collection process. The stakeholders identified for the qualitative interaction are depicted in Figure 56

Figure 54: Talukas Covered during Survey

Figure 55: Qualitative Research Design for the Study



After the completion of data collection, team carried out data entry, data cleaning, and analysis to arrive at the key insights from the impact assessment study. Responses were then analysed along with corroboration with secondary/desk research findings to arrive at detailed findings as depicted in the next section on <u>Analysis & Findings</u>.

6.3. Analysis & Findings

This section provides an overview of key findings emerged from the discussions with the key stakeholders:

6.3.1. Challenges before the Project

- High levels of indoor air pollution, resulting in respiratory problems, irritation in eyes and throatrelated issues such as choking and coughing among community members were some of the challenges faced by the local community of Ganjam district due to their dependency on traditional cookstoves for cooking. Women were highly prone to these problems as they were primarily responsible for cooking meals and were at a higher exposure to smoke emitted from cooking with traditional cookstoves.
- It was further noted that **buying firewood as fuel for cooking was not affordable** to the community members as most of them belonged to low earning income group.
- Another challenge was gathering wood from the forests, as it was time-consuming and involved drudgery. It
 affected the health and well-being of the women putting them in a condition of constant fatigue and
 leaving no time for any other personal or social activities.



6.3.2. Summary of the Impact Created

a. Profile of the Respondents

This section discusses the socio-demographic profile of 269 beneficiaries (n=269) based on the quantitative interactions carried out with them. It was noted that:

- 68% of the respondents were women whereas 32% were male, indicating that project has benefitted both
 men and women. Furthermore, the higher percentage of women respondents highlights the important
 role played by women in households, particularly in cooking activities. In rural areas, women often
 take charge of cooking and oversee the upkeep of kitchen utilities like cookstoves and other household
 resources. This aspect aligns closely with the objectives of the project, which aims to promote a
 cooking practice that is less risky, improves livelihood and reduces emissions.
- The study has included respondents across the different age groups to gauge the impact of this project. Majority of the respondents (38%) falls between the age category of 50 years and above, indicating a representation of the older age group individuals in the survey. As depicted in Figure 58, this diverse age distribution reflects the project's inclusive approach, aiming to empower and facilitate holistic development across all age groups.
- 88% were identified under the Below Poverty Line (BPL) category as they hold BPL card holders, indicating that project has reached out to beneficiaries from underserved areas.

Figure 57: Gender Distribution of Respondents (n=269)

Figure 57: Age Distribution of the Respondents (n=269)



<30 years 31-40 years 41-50 years >50 years

• **40% of the respondents** (n=269) reported that they have received **no formal education**. Additionally, 36% had education in the range 5th grade to 9th grade. This highlights that there is a potential to offer education suited to different community members, like adult literacy programs for the adult age groups and vocational trainings for the youth.



Figure 58: Education Qualification of the Respondents (n=269)

32%

57.6% of respondents (n=269) are involved in farming or agricultural labour, reflecting the community's reliance on agriculture. This is followed by 22.3% (n=269) who reported being involved in skilled labour like masonry, rating it as the second most followed occupation. Another, 14% of the respondents (n=269) were homemaker and are majorly engaged in the overall household chores. 2.2% (n=269) of respondents are self-employed while 1.5% (n=269) are unskilled labour which involves working as daily wage workers at construction sites. 0.4% (n=269), are small business owners having micro enterprises and small shops.



These findings highlight **farm activities as a primary source of livelihood** among the community along with a diverse range of other income generating activities. The details of the occupations of respondents are depicted below:

 When surveyed about their average annual income, it was noted that 38% of them had annual earnings between the range of INR 30,001 and INR 50,000 followed by 26% of the respondents having an income between INR 10,000 to INR 30,000. This distribution underscores that the project focuses on individuals with low annual incomes section of the society with an objective to uplift and empower them financially and promote inclusiveness in providing access to clean energy.

Figure 59: Occupation of the Respondents (n=269)



Figure 60: Annual Household Income of the Respondents (n=269)



63.6% of respondents reported that they live in a household with more than five members, indicating a
potentially high demand for cooking resources among such groups. With such large household size, it's
likely that a single cookstove may not be sufficient to meet their cooking needs effectively. Additionally, 7%
of respondents mentioned having households with over seven members, further emphasising the need for
additional improved cooking resources to cater the large size of the family.

Figure 61: Household Members of the Respondents (n=269)







b. Increased Adoption and Positive Change in the Behaviour of Respondents

Upon interactions, it was shared by 100% (n=269) of the respondents that they were aware of the cookstoves provided to them under the project through the funding support of Infosys Limited. Respondents were further probed on different sources of awareness as per Figure 63. 48% (n=269) of the respondents got to know about this project through door-to-door interactions conducted by the local representatives. 41% of respondents received the information about this project through community meetings. This suggests that the direct community engagement strategies have contributed to the dissemination of project specific information and awareness creation about the project and the benefits of cookstoves among the target population.



Figure 62: Source of awareness about the Project (n=269)

• After identifying beneficiaries through various outreach activities (as reflected in Figure 63), this project also carried out the training sessions to encourage community members towards adoption of the cookstove technology and understand its environmental impact. Only 9% of the respondents (n=269) stated that they have received such trainings whereas 91% of the respondents (n=269) shared that they have not received any such trainings. On probing further, it was noted that these community members majority lacked the access to trainings due to inadequate information dissemination/ outreach activities. It further highlights the need to strengthen the information dissemination process through deploying an outreach plan/ training calendar before the start of any such projects in near future.

Among the 23 respondents (9% of n=269), it was noted that:

- 87% of respondents (n=23) received trainings on benefits of tree-planting initiatives.
- 30% (n=23) reported that they were made aware about the benefits of using cooking stoves and its impact on the environment.
- Further, 13% respondents (n=23) stated that they have gained knowledge about the challenges surrounding general environmental improvements and their solutions as a result of decreased wood burning.

Figure 63: Aspects Covered under the Training Modules (n=23)



It was interesting to note that despite not receiving to 100%.
 any training (as mentioned by majority of respondents), 41% of respondents (n=269) have still adopted to environment-friendly practices (such as tree plantations) into their routine due to the regular usage of cookstoves provided under this project. It shows their willingness to engage in environmental sustainability beyond just cooking. Remaining 59% of the respondents (n=269) have not adopted to any additional environment friendly practices.



c. Integration and adoption of clean energy

- Prior to the introduction of cookstoves under this project, 95% of/ the respondents (n=269) were using wood for cooking in their households as it was easily accessible and less expensive than other fuel options.
- 9% of respondents (n=269) stated that they used either charcoal or LPG for cooking purpose. On probing further to understand the low usage of these two fuel options as compared to wood, it was noted that the reason for preferring wood (as fuel option) over other two options was the difficulty reported by community in accessing LPG in their region. Also, they had to purchase charcoal whereas wood can be obtained from the nearby forests without bearing any cost. This high prevalence of wood usage addresses the relevance of the project by providing a cleaner alternative to traditional cooking methods.

Figure 64: Types of Cooking Fuel used Pre-intervention (n=269)



Multiple choice question, and total may not add up to 100%.

 About 98% of the respondents (n=269) were dependent on the traditional cookstoves also known as 'Chulhas' (open-fire stoves) for cooking and only 2% (n=265) has alternative options available for cooking such as LPG or kerosene oil-based cookstoves before the intervention.

"

"It was very difficult for us to afford LPG cylinders due to connectivity challenges in our surroundings. We were dependent on traditional cookstoves which requires wood as fuel. We have easy access to wood due to the nearby forest areas."

As narrated by a beneficiary during the field interactions

- After the introduction of this project, 94% of the respondents (n=269) reported that they have been using cookstoves, highlighting the widespread adoption and integration of improvised technology by the community members. Further, this indicates a positive change in perception of community members towards utilisation of the cookstove among the target population.
- During interactions with beneficiaries, it was revealed that they were previously unaware of the benefits associated with the cookstove, such as enhanced fuel efficiency, reduced smoke emissions, and overall health advantages. This awareness was instilled among the community members through the project intervention, highlighting the impact of equipping community members with essential knowledge about the different options available for cooking.
- The remaining 6% of respondents (n=269) i.e., 15 respondents reported that they have stopped using the cookstoves. On probing to share the reasons for not using the cookstoves, it was noted that they faced challenges of cooking multiple times for a single meal for their family members as the size of the cookstove was not sufficient to cook on large utensils making it less convenient to use. It was reported by the respondents that they had to cook at least twice a day for their families of 4-5 members with only one cookstove available, which lead to over utilisation of the stove's gradually leading to its malfunction. In case of any accidental spillage of water and milk while cooking, also contributed to the stove's breakdown putting the beneficiaries in a position to stop using it. In some case, it was reported by the respondents that cookstoves were no longer working.

"





- On being asked about the changes observed in the amount of waste generated from cooking since using the cookstove, 57% of the respondents (n=269), reported a reduction in waste production. Probing further, the respondents (57% of n=269) elaborated, that traditional cooking methods often resulted in excessive waste accumulation, particularly due to the frequent cleaning and preparation required for the stove.
- With the adoption of cookstoves, the cooking process requires less usage of wood and has led to comparatively less lncreased waste quantity of waste generation. Additionally, the ashes produced by cookstoves are used for tasks such as washing kitchen utensils and to spread over agricultural land to increase the soil fertility, further minimising waste. This shift towards cookstoves has positively impacted waste management practices in households.

d. Overall Impact of using Cookstove

- Basis the discussion with technical partner, team noted that thermal efficiency²⁴ of the cookstoves is approximately 37%. This translates into less fuel consumption and overall reduction in the cooking time.
 88% of respondents (n=269) indicated that their cooking time is reduced due to the usage of such cookstoves.
- 16% (n=269) indicated experiencing a decrease in the cost of fuel wood because of using cookstoves. Further, the respondents shared that cookstove facilitates efficient burning of fuel wood and ensures complete combustion, hence reducing fuel waste and emissions. In terms of health benefits, 11% of respondents (n=269) reported that they have witnessed improvements in having better vision and reduced breathing issues. The reduced exposure to harmful smoke emitted by traditional cookstoves has led to better respiratory health and clearer vision among the respondents of cookstoves.
- Additionally, while interacting with the women respondents, it was shared that when cooking on traditional stoves, they had to blow on the flame vigorously to make the flume stronger, which led to inhaling harmful smoke and experiencing coughing and irritation in the eyes. However, after **switching to cookstoves**, **there is a reduction in such health issues**. This shift can have a broader implication for long term respiratory health concerns, potentially reducing incidents of respiratory diseases and associated health related problems. 2% of respondents (n=269) experienced no change, as they were using LPG cookstoves instead of traditional cookstoves.



Figure 66: Changes Observed Post Intervention (n=269)

*Since this was a multiple-choice question so it will not add up to 100%.





²⁴ It expresses the fraction of heat that becomes useful work.



The project primarily focused on women, as in the rural community mostly women take care of household chores such as cooking and are in direct contact with the cookstoves most of the time. The cookstoves have helped the women on various parameters:

- Decrease in the time spent in the kitchen after switching to cookstoves, enabling them to engage more actively in social activities outside their home.
- Decrease in the frequency to collect firewood from long distance gradually allowing them some time to take rest.

"

Though we haven't observed any severe health issue occurring from the traditional stove's smoke, there were discomforts like eye irritation and occasional breathing issues. Since we switched to cookstove, we felt an improvement in our health in terms of reduced eye irritation and breathing issue. We feel that reduced smoke has led to better indoor air quality.

- As narrated by a beneficiary during the interaction

"

e. Impact on Indoor Air Quality and Household Well-being

- During the discussion with Envirofit, it was noted that traditional cookstoves (chulhas) were producing substantial GHG emissions due to burning of non-renewable biomass. This project, by replacing traditional chulhas, addressed the Indoor Air Pollution problem by deploying cleaner and greener Cookstoves to reduce GHG emissions.
- Respondents were probed to understand the impact on air quality and household well-being due to usage
 of cookstove provided under this project. About 43% of respondents (n=269) experienced improvement
 in the quality of indoor air after using the cookstove, allowing families to cook inside their houses
 without compromising on the indoor air quality.
- On probing about the cookstove's impact on women's health and well-being, **57% of respondents (n= 269)** reported that they have experienced improvement in their health and well-being.
- When enquired further, team noted that changes in health aspects are mainly around fewer burning accidents, less itching eyes, more hygienic conditions, and less coughing. After probing respondents about the effectiveness of cookstoves in reducing smoke while cooking, 83% of the respondents (n=269) felt a significant reduction in the amount of smoke released in the air while 13 % of respondents (n=269) felt a moderate decrease while cooking. Respondents also stated that cooking on cookstoves has reduced air pollution by minimising smoke, which resulted in a clean indoor air quality for the family.



Figure 67: Change in the amount of smoke released into the air (n=269)

f. Enabling community members to effectively utilise the time saved:



During interactions, some respondents shared that the saved time enabled them to take care of children, attend to other household chores, and take care of the livestock. Additionally, some respondents shared that they utilize extra time for stitching and resting.

Among the respondents (88%, n=269) who reported that cookstoves has helped in reducing the time spent on cooking tasks, **67% (n=236) reported saving up to 15 minutes per day** on cooking tasks, indicating a relatively minor reduction in time spent cooking. However, **31% of respondents (n=236) reported saving between 15 to 30 minutes**, while **4% saved 45 to 60 minutes per day**. The variation in reported time savings reflects the different cooking processes and cooking habits of respondents. Some respondents shared, that everyone's cooking routine and preferences are different, influencing the amount of time while cooking on cookstoves.

Figure 68: Impact of Cookstoves on Cooking Time (n= 269)



Figure 69: Time Saved on Cooking Tasks Per Day (n=236)



Less than 15 15-30 minutes 30-45 minutes 45-60 minutes minutes

On being asked about the daily activities from time saved from cooking:

- 97% (n=236) felt that they are able to utilise the time for leisure activities such as taking rest in the afternoon, attending community meetings and engaging in social interactions within the community.
- 34% (n=236) felt improved productivity in other household chores. The respondents shared that apart from cooking, the time saved is used for other household chores like washing clothes, feeding the livestock, and cleaning the house etc. Earlier, cooking on traditional stoves involved time not only for cooking but also for preparing the stoves. However, switching to cookstoves has not only reduced the time spent in cooking but minimises the mess while cooking which has resulted in reducing the time for cleaning. This indicates that respondents are able to save time for themselves for another chores.



Figure 70: Activities undertaken with the time saved from cookstove (n=236)

g. Reduced expenditure on cooking

 When enquired about the changes in household expenses related to cooking fuel, 39% of the respondents (n=269) reported that the cost savings on fuel is attributed to the usage of cookstoves whereas 61% of the respondents (n=269) reported no change.



- When asked about the decrease in average monthly fuel expenditure, **86% of respondents (n=106 i.e., 39% of 269) reported a reduction of less than INR 1,000**, while 12% (n=106) observed a decrease in the range of INR 1,001-3,000 per month. Respondents mentioned that **cookstoves require less fuel compared to traditional stoves to cook the same amount of food. These cookstoves are designed to cook food efficiently hence, reducing both fuel usage**. This has resulted in overall savings in fuel costs for beneficiaries.
- The decrease in expenses which beneficiaries save due to the cookstoves was utilised by the respondents in different activities. 78% of the respondents (n=106) reported they utilise it in their children's education to secure their children's future while 35% (n=106) utilise it for healthcare expenses, prioritising their family's well-being and the other 25% (n=106) added it to their savings. During the interaction with beneficiaries, they mentioned that they use their savings to repay loans to community members, highlighting the financial empowerment enabled by cookstoves.



Figure 71: Activities Undertaken due to Reduced Expenditure of fuel (n=106)

"

When I used to cook on the traditional cookstove, the walls would turn black due to excessive smoke, for which I had to repaint them repeatedly. Since using the cookstove, we don't have to repaint the walls anymore, which also saves us money that we now spend on other necessities such as providing better educational facilities to our children.

- As narrated by a beneficiary during interactions

"

h. Perception of beneficiaries

Team further probed respondents to understand the overall perception on various parameters of the projects and it was analysed that:

86% of the respondents (n=269) felt improvement in household cooking safety, whereas 13% (n=269) acknowledged a moderate enhancement. Respondents shared that the cookstoves have a stable base which reduces the risk of losing balance or falling sideways, leading to avoid spilling of hot liquids and food items while cooking. It has heat-resistant handles, allowing safe cookstove movement to any place and no exposure to an open flame as the opening surface of the cookstove is very secure which decreases the risk of burns.





83% of the respondents (n=269) believed that the cookstoves have brought transformation in their community. It was noted during interaction with the beneficiaries that most of the community household uses cookstoves which indicates that there was a positive reception and acknowledgement of the project when implemented. It also emphasises that the community together takes charge of its surroundings to transform into a healthy community by switching to cookstoves.

86% 13% 1%

Figure 72: Safety in usage of the cookstove (n=269)

Yes, significantly Yes, to some No change extent

When asked about the training received on maintaining the cookstove, 8% of the respondents (n=269) had received training on maintaining and taking care of cookstove whereas 92 % of the respondents didn't receive the training. The same was noted while interacting with the respondents that, there was no formal training provided on maintaining and taking care of cookstoves. It can be interpreted that because of a lack of training, few respondents have stopped using the cookstoves as it was stopped working, indicating beneficiaries were not guided properly on the maintenance of the cookstove.

- Most of the beneficiaries were satisfied with the durability of the cookstoves, 87% of the respondents (n=269) never experienced any issues with the functionality of the cookstove since its installation whereas 13 % of respondents (n=269) faced difficulties with the functionality of the cookstoves since its installation while cooking. The same was noted while interacting with the respondents. It can be interpreted that the cookstoves are well-built and durable, and respondents rarely face any problems with functionality while cooking.
- Additionally, 79% of the respondents (n=34) who experienced issues with the functionality of the cookstoves, self-repaired the stove, while 18% sought help from the community members. This showcases that addressing issues themselves can help them to save money and addressing minor problems with the help of the community also enhances their knowledge on maintenance and care.
- 94% of respondents (n=269), who are still using the cookstoves reported that they regularly maintain the cookstove by cleaning the stoves, removing the leftover burned wood, and ashes, while remaining respondents occasionally maintain their cookstoves, to maintain its efficiency so that it can be used for long.
- Additionally, among respondents who use cookstoves, 87% of the respondents (n=254) take maintenance support from the maintenance agency while 5% and 6% of the respondents (n=254) take support from technical partner and local shop for maintenance. This indicates that the maintenance practice of cookstoves plays a crucial role in sustaining cookstoves' functionality. As the data reflects in Figure 75, respondents prefer maintenance agency for services that can highlight their ability to effectively resolve issues and ensure better cooking experiences.

Figure 74: Provider of maintenance support Figure 74: Frequency of maintenance of (n=254) cookstoves (n=254) 87% 90% 9% 6% 5% 1% 2% Regularly Occasionally Rarely Technical Maintenance Local Shop Self agency partner

96% of respondents (n=254) expressed satisfaction with the maintenance services provided by various, whereas 4% of the respondents (n=254) were neutral. It can be inferred that cookstoves were maintained and serviced whenever required. The positive response indicates that there was a proactive effort in addressing maintenance needs, which ensured that the cookstoves remained functional and efficient over time.

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Figure 76: Cookstoves provided under the project



6.3.3. IRECS Analysis

Basis the interactions with the key stakeholders and desk review, **the impact of the project was also assessed on the IRECS framework parameters**. The IRECS analysis summary has been presented in below table:

Table 8: IRECS Analysis

Parameter	Assessment from study
Inclusiveness	• The project is inclusive as it has been tailored to meet the specific needs of the community of Ganjam district , taking into account the socio-economic status.
	 68% of respondents (n=269) were women whereas 32% were male (n=269), demonstrating project encouraged participation of both men and women.
	 88% (n=269) of the respondents are BPL card holder and belong to the marginalized section of society. Additionally, there has been inclusion of respondents across different income brackets, with 38% respondents (n=269) reporting an annual income between INR 30,001 – INR 50,000.
	 The responds were belonged from diverse educational backgrounds with 46% of respondents (269) having no formal education to 26% (n=269) having completed their primary level education. This indicates that project is not restricted to any specific age, gender and social category of the community members.
Relevance	 98% of the respondents (n=269) were dependant on the traditional cookstoves also known as 'Chulhas' (open-fire stoves) for cooking which posed various challenges such as wastage of fuel, indoor air pollution and possibilities of health hazards.
	• With, 94% of the respondents (n=269) having reported that they are using the cookstove. The high adoption rate of the cookstoves highlights the need and preference of households.
Effectiveness	 88% of respondents (n=269) reported that they have experienced reduced cooking time due to the usage of cookstoves which is enabling them to engage in other activities.





Parameter	Assessment from study
	 After switching to cookstoves, 57% of respondents (n=269) reported that they have experienced improvement in their health and well-being. The reduced exposure to harmful smoke emitted by traditional cookstoves has led to better respiratory health and clearer vision among the respondents of cookstoves.
	 This project has contributed to cost savings on fuel providing economic benefits. 39% of the respondents (n=269) reported that the cost savings on fuel is attributed to the usage of cookstoves
	• 43% of respondents (n=269) stated that after using the cookstove they have experienced improvement in the quality of indoor air , further highlighting the reduced harmful effects such as coughing and eyes irritation which occurred while using traditional cooking methods.
	 The respondents shared that usage of cookstoves have enabled them to utilise time for leisure activities such as taking rest in the afternoon, attending community meetings and engaging in social interactions within the community.
Convergence	 This project has been facilitated through multi-stakeholder partnerships and collaboration with organisation like Envirofit, civil societies and community level representatives to ensure collective action in promoting clean energy solutions in the form of cookstoves.
Sustainability	• As per the MoU signed, Envirofit has agreed the upkeep and maintenance of cookstoves for a period of 5 years after the distribution of the cookstoves. The project has also provided trainings while distributing the cookstove. However, to ensure the long-term sustainability of such projects going forward, Infosys team can consider establishing tie ups with local vendors and nearby repairing shops for ease of maintenance which was not prevalent in this project.
	• Additionally, in areas where there is limited scope of tie up with local shops, training can be imparted to the volunteer/ community representatives who can come forward and further train other community members.

6.4. Alignment to the Infosys Limited's CSR policy and the UN SDGs

The project implemented is in alignment with Infosys Limited's CSR policy, which mentions, environment sustainability as one of the CSR focus areas for Infosys Limited. The project also contributes to relevant Sustainable Development Goals: SDG 3- Good Health and Well-being, SDG 4- Quality Education, SDG 7-Affordable and Clean Energy, SDG 8- Decent Work and Economic Growth and SDG 13- Climate action.



6.5. Study Limitation

Challenges in mobilization of project beneficiaries: One of the limitations of the study was related to the
mobilization of project beneficiaries. The survey team faced challenges in finding the target beneficiaries,
as the current on ground field team members who were assisting in mobilization process were new and had
limited association with the project beneficiaries. This led to difficulties in mobilizing participants for the
survey and hence, team had to use the convenient sampling based on the availability of the respondents.







Change story: 1 – Transforming Lives

Sunita (name changed), a homemaker from Talasara village in Ganjam district, regularly used a traditional cookstove for cooking meals three times a day. She spent hours collecting wood from the jungle since she couldn't afford to buy wood from the market. So, she bought a small amount of wood from the market and gathered the rest from the jungle, as for traditional cookstoves, wood was essential. She also dealt with smoky air while cooking on the traditional cookstove, which made her eyes red and irritated. It was tough and tiring, but she didn't know any other way.

Sunita came to know about Infosys initiative to provide cookstoves in the community through community meetings. She attended training on cookstoves and got aware of its benefits. Later on, when cookstoves were distributed by Envirofit, she completely switched to cookstoves. She is still using the new cookstoves with proper care and satisfied with its durability as it's been 5 years and her cookstove is working properly. While cooking, there is hardly any smoke, so her eyes don't burn anymore. Also, it uses less wood, so she doesn't have to spend as much time hunting for wood. It's like a breath of fresh air in her kitchen.

With less spending on fuel, Sunita can now afford to invest more in her children's education and healthcare. cookstove saves her time and money. Sunita can focus more on taking care of her family and even spend a little extra on her kids' education. She's also been telling all her neighbours about these cookstoves. Most of them already have one, but she wants everyone to know how much better life can be with these little changes.

Change story: 2 – Cooking for Change

Renuka (name changed) from Burujhari village, Ganjam, faced daily struggles with her traditional mud stove. Before using the cookstoves, she relied on it for cooking needs. The traditional stove emitted a lot of smoke, irritating their eyes and respiratory issues. But she didn't have any option apart from the traditional cookstove She used to gather fuel and wood for the traditional cookstove was also a time-consuming and expensive task.

However, Renuka's life changed when she discovered the benefits of cookstoves through a community programme by Envirofit. She eagerly adopted the cookstoves. Despite lacking formal training on the maintenance of cookstoves. She continues to maintain and take care of her cookstove by herself. She regularly maintains the cookstove by cleaning it. The transition brought immediate improvements to Renuka's daily life. The new stove reduced smoke emissions, making kitchen time more comfortable and enjoyable.

Although she encountered setbacks when her stove malfunctioned, she got it repaired by a maintenance agency. After switching to cookstove provided by Infosys, Renuka values the time and health benefits the stove brought in her life. Faster cooking times meant more time with family, and reduced fuel expenses eased her financial burdens. The constant exposure to smoke from the traditional stove had caused health issues for her and her family, but since using the cookstove, her family noticed an improvement in their health. Renuka's journey has also inspired her neighbors to always cook on cookstoves. Together, as a community in Renuka's village, they practice sustainable cooking which is not only healthier for their health but also for the environment.





 7. Project 4:
 Construction of Girls' hostel building at IIIT-Dharwad campus

7.1. Background

Higher technical education in India has undergone significant evolution over the years reflecting the country's changing socio-economic landscape and global technological advancements. Recently, the country saw a surge in engineering colleges, catering to the growing demand for technical education. The emphasis shifted towards interdisciplinary programs, entrepreneurship, and research-driven education to align with industry needs and foster innovation. Hence, the **role of academic facilities** becomes important in providing students with the resources and environment necessary for effective learning. One such aspect is **hostel facilities** which provides a **conducive environment for studying, fostering peer learning and collaboration, and promoting discipline and routine among students**. This enables students to **continue their studies**, **facilitates educational opportunities, and empower students (especially girls)** to achieve their full potential academia and beyond.

7.2. About the Project

Infosys Foundation has been supporting various projects providing quality education, especially for the girls. One such CSR project is **"Construction of Girls' hostel building at IIIT-Dharwad²⁵ campus"** which aimed **at providing modern residential facility for 300 girl students** at the IIIT-Dharwad campus in Karnataka²⁶. A schematic representation of the project specifics is depicted below:



Figure 75:Schematic Representation of Project Specifics

7.3. Method of Impact Assessment

The impact assessment study was carried out through a structured, sequential, and consultative approach to assess the social impact of this project. A kick-off meeting was held with Infosys Foundation to understand the entire scope of the support provided under the project and arrange for any additional documents / information for starting the exercise. Following this meeting, PW received following project documents from the Infosys Foundation team:

²⁵ Established in 2015, IIIT-Dharwad is an institute of National Importance set up in Public-Private Partnership mode by the Government of India (MHRD), Government of Karnataka, and Industry partner (KEONICS).

²⁶ MoU signed between Infosys Foundation and IIIT-Dharwad



- 1. MoU between IIIT Dharwad and Infosys Foundation
- 2. Project completion report

A desk review was conducted to understand the project's progress for the assessment period. Subsequently, stakeholders were mapped for data collection for both quantitative and qualitative research methods.

A mixed method approach (quantitative and qualitative research methodologies) was adopted to undertake the impact assessment study, in consultation with Infosys Foundation. A quantitative survey (virtual) was rolled out to the beneficiary students aimed at generating evidence around the impact that the project has been able to generate. Qualitative interactions were also conducted in the form of In-depth Interviews with the various project stakeholders. The qualitative data helped in corroborating the quantitative findings from the assessment while also providing the respondents' perspective of the perceived impact of the project.

Figure 76: Project Location



After the finalisation of research methodology, the research team developed tailored research tools for each type of

stakeholder in the assessment. Quantitative survey sample for the study was also finalised basis the information provided by Dean. IIIT – Dharwad on the number of girls residing within the hostel at the time of the study. It was noted that currently 80 girls are residing in hostel²⁷ which was considered as a total universe of the project and further considered to draw sample size of 63 using 90% confidence level (CL) and 5% margin of error (MoE). During the survey, team was able to interact with 77 girls, thereby meeting the sample size of 63. The evaluation framework including key stakeholders along with quantitative and qualitative coverage is as depicted below:

Figure 77: Stakeholder Mapping and Sampling Framework



* Computer Assisted Web Interviewing

^ IIIT - Dharwad representatives included Dean, Assistant Registrar, and Executive Engineer

Quantitative data collection for the project was conducted virtually through digital data collection tools. Qualitative data was collected during the research team's visit to the IIIT – Dharwad campus on 20th December 2023. Post the data collection, data entry, cleaning and analysis were carried out to arrive at the key insights from the impact assessment study. Responses were then analysed along with corroboration with desk research findings to arrive at detailed findings as depicted in the next section on Analysis and Findings.

²⁷ During the discussions, it was noted that due to low number of admissions, the girl student strength remains 70-80 every academic year. As the IIIT-Dharwad has recently started its functions at new campus, the visibility is low among the students nearby as mentioned by Dean, IIIT-Dharwad.

7.4. Analysis & Findings

Below section provides the key findings emerged from our interactions with key project stakeholders:

7.4.1. Challenges before the project

Following challenge were prevalent before the intervention:

- 1. IIIT Dharwad campus was earlier operating from a transit campus with no in-house accommodation facility for the resident students. The students were accommodated in a separate private hostel away from the campus, indicating that the **girls needed to travel** to and from the hostel to their classes daily.
- 2. The rooms in the previous hostel facility were not spacious enough, resulting in limited space within the rooms for the girls to move around after furnishing the rooms with the necessary infrastructure (beds, chairs, tables, etc.).
- 3. The previous hostel facility had **inadequate number of washrooms**. The facility also **did not feature any common hall within its premises**, which could be utilised for community learning.

7.4.2. Profile of the Respondents

Figure 78: State of Origin of the

Respondents (n=77)

CAWI based quantitative survey was conducted with 77 girls currently residing at the campus. A brief profile of the respondents of the survey is as follows:

- The state of origin of majority of the respondents (n=77) is Karnataka (48%) as depicted in Figure 79. The average age of the respondents (n=77) is 19 years.
- 36% of the respondents (n=77) were admitted in FY 2023 followed by 34% from FY 2021 batch as depicted in Figure 80:



Figure 79: Year of Admission to IIIT - Dharwad (n=77)



7.4.3. Summary of the Impact Created

1. Overall perception of the girl students

Old Hostel Facility:

4 students (n=77) agreed that they have used the old hostel facility before moving to the new hostel facility. These students gave their opinion / rating (on a scale of 5²⁸) on the various facilities of the old hostel facility as mentioned below:



 $^{^{\}mbox{28}}$ 1 being the lowest and 5 being the highest


- Average rating of 2.75 to the rooms / dormitories.
- Toilets were rated 1.75 (below average)
- Further, qualitative interactions highlighted that:
 - Number of toilets were insufficient for the girls residing in it
 - No common hall
 - No open terrace / lobby
- The caretaker at the new hostel facility was also working as the caretaker at the old hostel facility and she has corroborated these findings during the qualitative interactions.

"The previous facility had a lot of constraints. The rooms at the facility were congested and there wasn't much space left in the room to move around. There was no common hall in the hostel facility, which limited the interaction between the girls as a group. Also, the number of washrooms was very limited when compared to the new building."

As narrated by the caretaker (Girls' Hostel) at IIIT – Dharwad during field interactions

New Hostel Facility:

- 96% of the respondents (n=77) responded that they were happy with the infrastructure at the current hostel facility.
- When enquired on the sufficiency of rooms and washrooms within the hostel facility, 100% of the respondents (n=77) agreed that the hostel facility currently has sufficient rooms to accommodate the resident girls, while 88% of the respondents (n=77) were of the opinion that the hostel facility has sufficient washrooms in place.
- The respondents (n=77) were also asked to rate the facilities at the hostel on a scale of 1-5 to gauge their perception around these facilities (Figure 82). These responses indicate that the residents rate the hostel facilities as better in comparison to the old hostel.

Figure 80: New Hostel Facility



Figure 81: Respondents' rating to various facilities at the hostel



"The current hostel facility has spacious rooms, enough washrooms, provision of lifts, and a common room. The common room also has a TV set-up in it along with table tennis setup and provision for indoor games, such as board games and carrom."

As narrated by the warden (Girls' hostel) at IIIT – Dharwad during field interactions





 Further, 100% of the respondents (n=77) agreed that there is sufficient power backup within the hostel facility and that the electricity supply remains unhindered throughout. 92% of the respondents (n=77) agreed that the water supply also remains unhindered throughout. During the qualitative interactions with the executive engineer at IIIT – Dharwad, it was noted that although ensuring the electricity and water supply throughout is the responsibility of administration department of IIIT- Dharwad, Infosys Foundation, as part of the building's design built-in dedicated areas and piping systems which was leveraged to ensure uninterrupted supply.





Figure 83 : Common Hall at the Girls' Hostel



2. Overall Impact

• The respondents (n=77) were asked to rate the hostel facility on a scale of 1-5 (1 being the lowest and 5 being the highest) on various parameters. Below Figure **illustrates the average rating provided by these respondents:**

Figure 84: Average Rating given by the Respondents (n=77)





"Academic benefits are not directly linked to the hostel facility. However, as the hostel facility is within the campus, the resident girls can spend more time at the libraries. I am also a professor at the institute and can say that this definitely has had an impact on the academic performance of a few students."

As narrated by the hostel warden (girls' hostel) at IIIT - Dharwad

- The maintenance of the facility lies with IIIT-Dharwad. Hence, to ensure that issues are reported and addressed promptly, the hostel warden keeps a channel of communication open with the occupants as well as the caretaker through a complaint register. This ensures that minor issues are handled at the hostel warden level itself. However, during the interactions, it was highlighted that there have been issues pertaining to plumbing within the washrooms. This is a cause of concern and creates issues related to cleanliness and hygiene (Figure 86). Team further noted that:
 - 23% (n=77) of the respondents faced certain issues. On probing further, 67% of them (n=18) highlighted challenges related to infrastructure which included seepage, issues related to functioning of doorknobs, handles, etc.

7.4.4. IRECS Analysis

Figure 85: Piping Issue in the Washroom



Based on interactions with key stakeholders and desk review of the project documents, **impact of the project** has also been assessed on the IRECS (Inclusiveness, Relevance, Effectiveness, Convergence, Sustainability) framework parameters. The IRECS analysis summary has been presented in below table:

Table 9: IRECS Analysis

Parameter	Assessment from Study
Inclusiveness	 As the hostel facility has been constructed for girl students studying at IIIT – Dharwad, gender inclusiveness is intrinsically built within the project's objective.
	• Further, the current occupants of the hostel facility are from various states across the country, evidencing regional inclusivity. Project was not restricted to any age, and social category.
Relevance	The older hostel building was far off from the campus, causing delays due to unnecessary daily commute time for the girls.
	• The current hostel facility was built on the new campus of the IIIT-Dharwad. It was essential considering the fact that the institute planned to operate from the new campus permanently.
Effectiveness	 Instances highlighting the effectiveness of the project as evidenced by the survey and interactions with the stakeholders are as follows:
	• 96% of the respondents (n=77) agreed that they were happy with the infrastructure and the facility provided within the hostel. Out of a total of 77, 4 students (who had also resided in the previous hostel facility) mentioned that the current facilities at this hostel are better than the facilities provided at the old hostel.
	 Respondents mentioned that there were certain specific challenges in the previous facility which have been dealt with in the current building. For example, the number of washrooms in the previous hostel was very less.

75

Parameter	Assessment from Study		
	The current hostel facility, however, caters to this problem and the number of washrooms is sufficient and as per the strength of the hostel.		
	 On a scale of 1-5, the average ratings that the respondents (n=77) gave to certain facilities are, (i) Rooms – 4.1, (ii) Washrooms – 3.7, (iii) Dining Hall – 4.0, and (iv) Common Room – 4.0. This indicates that the residents are happy with the facilities that are being provided within the hostel facility. 		
	• 100% and 92% respondents (n=77) stated that the hostel facility has access to uninterrupted electricity and water supply respectively . Although this is not as part of support from Infosys Foundation, the design of the building to cater to installing the infrastructure necessary for this was part of the construction.		
	• When asked to rate the hostel building on (i) quality of infrastructure, (ii) Cleanliness and hygiene, and (iii) safety and security on a scale of 1-5 (1 being the lowest and 5 being the highest, the respondents (n=77) gave an average rating of 4.1, 3.7, and 4.2 respectively.		
Convergence	• The project complements Government's efforts of providing quality higher technical education to the youth in the country. The project has been implemented within the campus of a government institute, further reinforcing convergence with the Government's efforts and vision.		
Sustainability	• During the interactions, 77% of the respondents (n=77) stated that they did not face any issues with the hostel facility during their stay. This indicates that the building has been able to meet the expectations of the occupants. This was also corroborated by the Executive Engineer during the field interaction, who emphasized that with proper care and periodic minimum refurbishment, the hostel facility may last for several years to come.		
	• To ensure that the building is well maintained, the IIIT- Dharwad administration has put in place a committee which investigates and resolves any complaints (infrastructure or otherwise) coming from the students pertaining to the building. It ensures that any minor issues are promptly resolved and hence any major issues are avoided.		

7.5. Alignment to the Infosys Limited's CSR policy, and UN SDGs

The project is **aligned with Infosys Limited's CSR policy** which includes **education, as the key CSR focus areas** for Infosys Limited. The project is also aligned with Sustainable Development Goal²⁹: **SDG 4 "Quality Education"**, SDG-4 aims to ensure inclusive and equitable quality education, whilst promoting lifelong learning opportunities for all.



7.6. Study Limitation

Limited stakeholder mobilisation: A "focused group discussion" (FGD) was also planned to be conducted with the resident girls. However, due to examinations and other academic obligations, the resident girls could not be mobilised and hence the FGD was not conducted.

7.7. Case Story

Following case story has been gathered in discussions with the stakeholders:



²⁹ Source: https://sdgs.un.org/goals



Case story 1: Campus hostel to academic success

Jaya (name changed) hails from Karnataka and is in 2nd year of her Computer Science engineering course at IIIT – Dharwad campus. She states that the construction and design of the hostel facility provides a comfortable environment. Each and every facility has been designed so as to cater to the needs of the occupants.

She especially enjoys spending time with her friends in the common room. According to her, it is an ideal place to relax or to study as a group. The place is especially vibrant just before the examinations. It is equipeed with TT table and indoor board games, which provides ample opportunity to unwind after a long day.

Although she has not been to the old hostel facility, from what she has heard the new hostel facility setup in place by Infosys Foundation is much better. One of the major advantages is that the hostel facility is located on-campus. This allows her and her friends time to visit the library post their classes. She has been consistently performing in the examinations and she gives part of the credit of her success to the hostel and its facilities.





8. Project 5: Provide infrastructure for the Construction of the Museum of Art and Photography



- Museums play an important role in imparting education through the depth of experience. They have the
 potential to foster a positive learning environment among young children through real artifacts, dioramas
 and immersive exhibitions. In today's dynamic world, cultural institutions like museums constantly face
 challenges and opportunities. It has been difficult task for them to stay abreast with emerging technologies
 as these institutions are rooted in history and artifacts of the past.³⁰ The amalgamation of modernity and
 history has been limited, so far.
- In the recent past, the growth of digital technologies has transformed the interaction with art. Technology is transforming the art world, offering new ways for artists to create and for audiences to experience and engage with art. From digital art to virtual reality, technology is opening up new possibilities for creativity and innovation and further, it has also made art more accessible than ever before. Now, artists can showcase their work online to reach a global audience without the limitations of a physical space and geographical boundaries. Online galleries and platforms provide opportunities for exposure and recognition, particularly for emerging artists who may not have access to traditional art institutions.³¹ At the same time, while online platforms offer an unprecedented reach and democratise cultural experiences, they also pose challenges.
- Audience engagement that was once nurtured by physical interactions and shared experiences now requires innovative strategies to harness interest in a plethora of online distractions³² or else culture and heritage as arts would be diluted to modernity.

8.2. About the Project

Culture is an important initiative at the Infosys Foundation besides Healthcare, Education, Destitute Care and Rural Development. Under this initiative, the Infosys Foundation has been undertaking many CSR projects with an objective to **preserve traditional art**, **dance and craft** to **support underprivileged artists like** writers, painters, poets, and musicians through financial assistance, promoting their work and helping them gain recognition in their field of work.³³

One such CSR project works to '**Provide Infrastructure for the Construction of the Museum of Art and Photography**' through funding to support the Art and Photography Foundation in Bengaluru, Karnataka. The Mission of Museum of Art and Photography (MAP) is **to democratise art while making it pleasant and relatable to everyone as much as possible.** This state-of-the-art Museum further works on the **objective of changing people's perception towards art** by making the museum a melting pot of ideas, stories and cultural exchanges inspiring people to interact with art in ways that encourage humanity, empathy and a deeper understanding of the world.³⁴

A schematic representation of the project specifics is depicted below:

Figure 86: Schematic Representation of Project Specifics

³⁰Source: <u>https://www.stevenson.edu/online/about-us/news/role-of-museums-education/</u>

³¹ Source: <u>https://www.pinotspalette.com/naperville/blog/creative-life/-pinotspalettenaperville-art-and-technology-how-technology-is-changing-the-art-</u>

world#:~:text=Technology%20is%20transforming%20the%20art,possibilities%20for%20creativity%20and%20innovation . 32 Source: Parry, R., 2010. Museums In A Digital Age. Abingdon: Routledge.

³³ Source: <u>https://www.infosys.org/infosys-foundation/initiatives/culture.html</u>

³⁴ Source: https://map-india.org/about/our-mission/



Inaugurated in FY 2022-23, MAP is dedicated to education, inclusivity, and preserving the arts³⁵ to actively engage with the community through a variety of activities:

Table 10: List of Project Activities

#	Activity	Description
1.	Offering educational programmes and outreach projects	MAP conducts workshops and educational sessions where individuals can learn about various art forms. Through outreach projects, it extends its reach to underprivileged communities, ensuring access to art education for all
2.	Hosting cultural events and exhibitions	MAP organises regular cultural events and exhibitions showcasing diverse artistic expressions. These events provide opportunities for artists to showcase their work.

The MAP building focusses on accessibility and inclusivity for all visitors, particularly those with disabilities. This museum is divided into five storeys which encompass an art gallery, an auditorium, an art and research library, an education centre, a specialised research and conservation facility and other facilities (such as a cafe, a member's lounge and a restaurant).³⁶

Basis the interactions with the Art and Photography Foundation team, it was noted that the Infosys Foundation provided a **funding support of INR 7.10 crore** along with other funders to support the construction of the new building for MAP. This construction of the MAP building provided a platform to carry out the subsequent activities with the funding support of other donors which led to a collective impact of the project. This collective contribution benefited **92,997 beneficiaries (cumulative visitors)**³⁷ **since its inception in FY 2022-2023**. Besides, MAP also conducted various educational and outreach activities which has benefitted range of stakeholders and its impact has been discussed in later sections of the report³⁸. This funding from the Infosys Foundation played an important role in the realisation and success of MAP project making a positive impact on the community and cultural landscape.

8.3. About the Implementing Partner

Established in 2011, the Art and Photography Foundation (APF) is a non-profit organisation committed to preserving and promoting Indian cultural heritage by connecting arts with the wider community. APF **furthers awareness, education and conservation of Indian art and heritage through various educational programs**. It also manages a collection of Indian art, currently undergoing archival, digitization and preservation efforts. Artworks from this collection play a central role in the Foundation's education and outreach



³⁵ Source: <u>https://www.apfoundation-india.org/map</u>

³⁶ Source: https://map-india.org/about/the-museum/

³⁷ Information received over email from MAP

³⁸ As per the information received from MAP team, since the Museum was operationalized in February 2023, we have captured the cumulative number of beneficiaries in different activities (as applicable) in respective sub-section.



Figure 87: Location of the Museum of Art and Photography



Figure 88: Museum of Art and Photography (MAP)



8.4. Method of Impact Assessment

PW conducted the impact assessment study to evaluate the impact that has appeared since the project's implementation. The process began with a **kick-off meeting with the Infosys Foundation and APF project team** to gain an understanding on the nature of support provided under the project and further align on expectations for commencing the assessment. Following the meeting, PW team received project related documents from Infosys team which consisted of the following:

- Memorandum of Understanding (MOU) signed between the Infosys Foundation and APF team
- Completion Certificate
- Project Reports
- Pictures of MAP Museum Building Construction

PW team then began the project's desk review of received documents in line with the information received during the kick-off meeting. This helped the team in designing an assessment framework and finalising the key stakeholders for the interactions. Further, the team worked on developing a **structured qualitative methodology** for evaluating the impact of project.

A qualitative research methodology was leveraged to assess the impact owing to the nature of this project. The grant allocated for this project primarily supported the construction of the museum building. Qualitative research methodology in this scenario was useful in **assessing and exploring the subjective experiences and providing in-depth information** of the individual perspectives pertaining to the project. Moreover, this exercise intends to assess perspectives and perceptions of the different project stakeholders involved.



³⁹ Source: <u>https://www.apfoundation-india.org/</u>



Figure 89: Qualitative Research Design for the Study



Once the stakeholders were identified and research tools were prepared, an **on-site visit to the museum** was conducted to interact with the respective stakeholders. As depicted in Figure 90, a total of **nineteen interactions** were concluded including **seven virtual interactions**. The **responses collected from the stakeholders**' **interactions were then analysed** to arrive at detailed findings as depicted in next section on <u>Analysis & Findings</u>.

8.5. Analysis & Findings

Based on the desk review of project documents received from Infosys Foundation and the APF team and the interactions with the project stakeholders during the field visit, PW team could summarise the findings of the study as below:

8.5.1. Challenges Before and During the Implementation of MAP Project

During the interactions with Director of the Museum of Art and Photography, the PW team noted that APF was initially looking at a public private partnership with the government and the three museums across the road, i.e., Venkatappa Art Gallery, Government Museum in Bengaluru and Visvesvaraya Industrial and Technological Museum, but it did not materialise. Later, APF decided to proceed ahead and started reaching out to CSR donors (including Infosys Foundation) to support them in building this Museum.

After signing of MoU with the Infosys Foundation the Museum was planned to be opened in 2021 but **due to the restrictions imposed by the Covid-19 lockdown, the opening was delayed.** It is evident that outbreak of Covid-19 pandemic presented unprecedented challenges to cultural institutions worldwide, and **MAP was no exception.** This project was also briefly **halted in March 2020 due to the Covid-19 pandemic**, but it was resumed in May 2020. It was a difficult time to sustain and stay relevant for the Museum as mentioned **by Director of Museum of Art and Photography**. To overcome these challenges, MAP went for a digital opening of the Museum wherein they created Computer Generated Imagery (CGI) workspaces so that people could experience the Museum virtually. There also were online performances that were streamed on social media platforms such as YouTube which saw the participation of many renowned personalities. It was a challenge to do these activities in-person and hence, digital opening and digital exhibitions were undertaken as the teams continued working from different remote spaces.⁴⁰ Total **15 digital exhibitions**⁴¹ were conducted till the date of study.

8.5.2. Summary of the Impact Created

MAP is a blend of old and new, where traditional art meets modern technology. MAP brings together timeless masterpieces, smart ways to access art and pioneering digital experiences. The section below offers an overview of impact created by this project on the lives of various individuals involved at different levels:

1. Creating a Sense of Ownership amongst Local Artists



⁴⁰ Source: As per project documents received from Infosys Foundation

⁴¹ Source: Information received over email from MAP

As per the interactions with the Museum staff, the decision to offer free access to the Infosys Foundation Gallery at MAP has positively impacted overall visitor engagement.

- Infosys Gallery is a welcoming space for diverse audiences. It is a free-to-the-public gallery that
 plays a crucial role in making art accessible and inclusive. The dynamic nature of the gallery featuring
 unique exhibitions on topics like Artificial Intelligence (AI), art, mental health, and photography
 alongside miniature paintings, etc. draw considerable footfall.
- This Infosys Gallery is on the ground floor and serves as a space for exhibitions. Being on the ground floor makes it one of the most accessible places in MAP.
- This gallery holds a special significance due to the nature of the exhibitions hosted with a rotation of exhibits approximately every three to four months.
- The exhibitions often have a specific connection to the community, for instance, the inaugural exhibition (total 8 physical exhibitions till date) featured the work of L. N. Tallur, an artist from the state of Karnataka. The reason behind selection of local artists is to foster a sense of ownership within the community making them feel represented in the Museum. Building this connection encourages the community to see MAP as their Museum turning them into advocates who can convey the message to a wider audience, both nationally and globally.

Figure 90: Artwork of L.N. Tallur



Figure 91: Infosys Foundation Gallery



2. Transforming Experience through Technology Advancements and Digital Experiences

During the interactions with the visitors and the Museum staff it was noted that **technology has played a key** role **in transforming the experience at MAP.** Technology has helped make art accessible to more diverse communities and helped in breaking down barriers. It was noted that MAP employs innovative approaches to offer a comprehensive engagement with traditional art by leveraging media and animation. Following are some of the key initiatives noted during the interactions:

• **3D Holograph**: The incorporation of 3D holograph technology at MAP has **positively enriched the exhibition experience** by captivating visitors with mesmerizing visuals.





- Photolamping and DIYA app: In response to challenges posed by Covid-19 pandemic MAP innovated the concept of 'photo lamping'. Through the DIYA app, this institute deployed an approach for lighting the lamp during the ceremony, virtually. Individuals could remotely engage with artifacts ensuring continued access to the museum's offerings despite restrictions on physical visits. In FY 2022-23 and 2023-24⁴², total number of participants were 52,313 with average number of ~5,231 every month.
- **360-degree Artwork**: Innovative integration of technology into the Museum experience (including AN immersive 360-degree views for the artworks) has facilitated **comprehensive engagement of the visitors** with the artworks at the Museum contributing to an enriched visitor experience.
- Bloomberg Connect App: Introduction of the Bloomberg Connect app enriches visitor interaction by providing detailed information on various art pieces. Visitors can use the Bloomberg app to listen to descriptions as they walk through and access the exhibition. In FY 2022-23 and 2023-24⁴³, total number of users were 16,903 with average number of visitors ~1,408 per month.
- Augmented Reality (AR) Filters: In partnership with META⁴⁴, MAP developed AR Instagram filters based on a few artworks from the collection that are currently on display at the Museum as part of the first exhibitions. The filters have been a huge success and have enabled visitors to interact with MAP's artworks in exciting ways, educating them about different artists or art forms through games, quizzes, colouring activities and more⁴⁵.

The main aspect which makes the MAP project unique and special compared to other Museums is MAP's focus on developing a museum-going culture with people having good experience, extending the experience through technology to make it an engaging space with digital experience to cater to the audience, and by also providing the opportunities for the visitors to attend workshops.

-Development Manager, MAP

MAP's staff informed that this **institute is dedicated to foster a museum-going culture among the community which sets MAP apart from other similar institutes.** The project focuses on **creating positive visitor experiences through technology and further provides an engaging and inclusive space** with a focus on accessibility through infrastructure improvements.

Inclusivity was the major factor taken into consideration while setting up the infrastructure at MAP and accordingly, all the content on Internal Display Interface (Figure 93) is available in multiple languages including English and Kannada to cater to the local community. For those who cannot read and write an audio guide is available in multiple languages furthering the inclusivity of different types of visitors. MAP's digital initiatives including the use of technology, workshops and digital learning platforms showcase its commitment to making art not only accessible but also an engaging and enriching experience for diverse audience groups. While interacting with visitors, it was noted that no other places nearby or even

Figure 92: Internal display interface



nationally offer the same kind of inclusive, easily accessible and comfortable digital experiences as MAP. In FY 2022-23 and 2023-24, total number of audio guide users were **383**.⁴⁶

⁴² Data from March, 2023 to January, 2024

⁴³ Data from February, 2023 to January, 2024

⁴⁴ Meta Platforms, Inc., doing business as Meta, is an American multinational technology conglomerate.

⁴⁵ Source: <u>https://map-india.org/wp-content/uploads/2023/06/MAP-Annual-Report-2022-2023.pdf</u>

⁴⁶ Source: Information received over email from MAP



This experience showed that MAP is really committed to making art enjoyable for everyone irrespective of their abilities. This is a great outcome because it means that more people can enjoy and learn from art. By providing support to artists and showcasing diverse cultural expressions MAP contributes to enriching the cultural landscape. With the growing shift to digital platforms, my experience of engaging with the MAP digital initiatives has been both fascinating and enriching.

It all began when I came across a captivating sign language video shared by my friend on a social media app, where they passionately explained the intricacies of MAP's artworks. This introduction to MAP's digital presence sparked my curiosity, prompting me to delve into the online world of the Museum. Use of sign language to discuss art added an extra layer of accessibility and inclusivity making the content not only informative but also artistically presented.

- An experience shared by a visitor with impaired hearing during interaction

Impact of MAP's Digital Outreach during the Pandemic⁴⁷:

During the Covid-19 pandemic, MAP shifted its programmes online to reach digital audiences. Below points summarise the key activities carried out in this regard:

- Four digital exhibitions were released on the Google Arts and Cultural platforms whereas five webinars were conducted online in collaboration with the Bangalore International Centre (BIC) as well as independently.
- During the period from October to December 2020 105 participants engaged with such programmes. The cumulative total of beneficiaries who engaged online was 16,814 people. Additionally, over 30,000 people watched the Art (is) Life Festival online.
- MAP has been actively involved in developing digital learning programmes for schools as well as for the general audience. During pandemic, MAP collaborated with Artreach India for weekend online workshops benefiting children at Tara Homes (Shelter Homes) and piloted the inaugural family workshop for a corporate organisation. Additionally, a masterclass on renowned artist was conducted in partnership with WizKids that drew participants across the country. Total 6 online workshops were organised.

3. Inclusivity in MAP's Programmes

During the interactions with various stakeholders the following MAP's initiatives were noted to foster inclusivity:

- Tailoring Programmes to Attract All Sections of the Society: MAP's dedication to inclusivity has deeply impacted diverse demographics, reflecting its commitment to accessibility for all. Museum's tailored programmes are designed to make art accessible and inviting to individuals of all ages, abilities, and cultural backgrounds, ensuring that everyone feels represented and welcomed. MAP also invites LGBTQ and the differently- abled community to various events such as Inclusion Conference and International Week of the Deaf which further contributes to create a more inclusive environment within the organisation
- Accessibility Friendly and Inclusive infrastructure: Right from the inception, prioritising inclusivity played a pivotal role in shaping the museum's infrastructure emphasising its importance in creating an environment that caters to diverse needs. This ongoing effort towards inclusivity has resulted in tangible outcomes such as increased participation and a more vibrant and diverse visitor community. Inclusivity is evident not only in the Museum's programmes but also in its physical infrastructure which includes amenities like ramps and lifts for individuals with varying abilities. As informed by Museum staff, MAP is also collaborating with the ReReeti Foundation to encourage Indian Museums to unite for enhanced accessibility.
- Incorporation of Braille⁴⁸ and Sign Language: Incorporation of Braille in all physical spaces within the Museum and the active involvement of people with disabilities among the staff further solidify MAP's dedication to creating a space that is accessible to everyone. MAP embraces accessibility and inclusion for all and hence this commitment focusses on incorporating sign language into all visual interfaces,





⁴⁷ Source: As per project documents received from Infosys Foundation

⁴⁸ A tactile writing system used by visually impaired people.

facilitating enhanced interpretation for individuals with auditory challenges. In a proactive move toward a more inclusive workplace MAP has also ensured that its employees are equipped with sign language skills.

 Introduction of Quiet Rooms: MAP has also redefined itself as a welcoming space for everyone, introducing quiet rooms to provide a calming environment for neuro-divergent individuals. This transformation has not only changed the physical aspects of the space but has also altered how people experience it.

From the perspective of our foundational education programmes, we curate exhibitions and invite diverse groups of children to engage with them encompassing various age groups, backgrounds, and skill sets. Our commitment to inclusivity extends to reaching out to children from different backgrounds and people with disabilities. For initiatives like the Bloomberg audio guide, we meticulously involve various groups such as people with visual, hearing and movement limitations in the testing phases. This comprehensive approach ensures that potential challenges including wheelchair accessibility and other concerns are identified and addressed before finalising our infrastructure and audio guides. Additionally, we incorporate tactile works in all exhibition spaces providing people with disabilities with different kinds of sensory experiences. This allows them to touch the tactile works and gain a deeper understanding of the paintings.

- As shared by Director of MAP during interaction

As shared by the stakeholders following are the few programmes and exhibitions **conducted with an inclusive approach** during the interactions:

• Activity 1: Transformative Inclusive Programmes (International Week of the Deaf): Many members of the deaf community participated in the International Week of the Deaf programme at MAP. Sign language interpreters were present throughout providing interpretation and clarification for any of their questions. Even during picture walkthroughs, the interpreters were there to explain every detail of the artwork. In FY 2023-24, total number of participants (including Deaf) were **230 across 4 days** (one event) organized.⁴⁹

The celebration of the International Day for Sign Language stands as a testament to MAP's impact on the community. This inclusive programme not only garnered widespread attention but also created a positive buzz on social media platforms. The engagement and participation in such events have not only elevated MAP's reputation but have also fostered a more inclusive cultural hub that actively embraces and celebrates diversity.

What particularly stood out to me is how MAP has extended invitations to deaf individuals through sign language, ensuring that the digital experience is not only visually engaging but also caters to diverse communication needs. This effort to bridge the gap and make the museum's content accessible to the deaf community.

- as shared by a visitor during interaction

When I first heard about MAP, I was unsure if it would be accessible for everyone, especially for deaf people. But when I visited, I was surprised to see a deaf person enjoying the exhibits with the help of a sign language interpreter. They could ask questions and communicate easily with the staff.

- as shared by a visitor during interaction

• Activity 2: Visible and Invisible Exhibition: This exhibition was initially planned to showcase highlights from the Museum's collection. However, during the planning phase it was decided to shift the focus towards a topic relevant to the community. As informed by the Director of Museum of Art and Photography, the exhibition highlighted the paradox of women's visibility in the field of arts vis-a-vis their invisibility in the public domain raising questions about biases and patriarchal norms with the goal to encourage reflection and contribute to social change.

During the interaction with the Director of Museum of Art and Photography, it was noted that **there are various groups being represented at MAP including individuals with disabilities and people engaged in indigenous arts, etc.** Also, while many museums predominantly exhibit classical arts and



⁴⁹ Source: Information received over email from MAP



consider them as 'high art' 50, MAP takes a different approach **to focus on art created by diverse communities, believing that it deserves equal respect.** For example, the ancient method of bronze casting by the country's craftsmen dating back 4,000 years has never been acknowledged as 'high art' but MAP believes it's crucial to highlight and value such art.

A significant portion of MAP's collection includes items uncommon in other museums representing aspects of **mass culture** that resonate with the common people. It is evident that **art resonating with both the general public and the specific communities finds a place in the museum because it reflects the society.** So, as an organisation, **MAP is not just a space for dominant voices but also acts as a platform for marginalised communities to be heard.** Total **27,449 participants** were benefitted from FY 2022-23 and FY 2023-24.⁵¹

4. Strengthening Community Engagement

MAP collaborates with many like-minded organisations to create an impact through wider community engagement. During the interactions with the museum staff, it was noted that MAP undertakes regular community engagement initiatives. One such initiative is on the **Mindscapes project** which is an **international collaboration supported by the 'Welcome Trust' aiming to support mental health and well-being**. It is a space where individuals can transform their understanding of mental health and have a dialogue about it.

- For this initiative, MAP is one of the chosen institutions along with various other organisations such as the Brooklyn Museum in New York, the Mori Art Museum in Tokyo, and another institution in Berlin.
- One notable programme under this initiative was 'Nammakatte' which was in collaboration with a renowned artist. This space was dedicated to fostering dialogue among children, women and the neighbourhood. It served as a venue for community conversations where individuals can freely discuss everyday activities and engage in meaningful exchanges as highlighted by MAP staff. This initiative is still being implemented due to its success over a period of time.
- Additionally, individuals at Nammakatte engaged in stitching clothes and writing messages that reflect their struggles. This artistic expression provided them with a platform to share their traumas fostering a safe space for healing and conversation. This work was commissioned by MAP and Infosys Foundation gallery was used for exhibition to display this work. The exhibition's goal was to stress that what truly matters in a presentation is its impact and not just its aesthetic appeal. It highlighted the importance of initiating meaningful conversations accentuating the value of dialogue over visual attractiveness.

5. Enhancing Awareness and Creating Learning Opportunities

In addition to museums being the guardians of art and culture they play a crucial role in the furtherance of education in the society to the people in general and students. The following programmes undertaken at MAP depict the same by creating learning opportunities for the participants:

School Group Interactions: In this programme, schools are chosen annually with a focus on supporting students in these low-income schools. MAP assisted by providing travel subsidies and other support to ensure their access to the space. This partnership involved reciprocal engagement wherein students visit MAP for workshops and MAP conducts sessions at the schools in return. These off-site workshops encouraged interactive discussions between students and facilitators enriching their learning experience. In FY 2023-24⁵², total number of participants were **1,234 across 21 art workshops and 18 walkthroughs** organised. Total **27 schools** were engaged in such group interactions. ⁵³

Engaging school children from low-income background in educational programs is considered **impactful providing them with a unique insight into museum spaces**. The education team at MAP offered **insightful walkthroughs, fostering critical thinking about artworks, colors, and their contextual significance.** Interactive sessions cultivated an understanding of exhibition setups, curation and the functioning of museums.



⁵⁰ High art refers to works of art that are considered to have significant cultural, intellectual, or aesthetic value. They may include classical paintings, sculptures, or other forms of visual art that are esteemed for their artistic merit and historical significance.

⁵¹ Source: Information received over email from MAP

⁵² May onwards

⁵³ Source: Information received over email from MAP



Initiatives like 'Journeys Through Art' contribute significantly to fostering critical and creative thinking within the curriculum, enriching the educational experience for diverse audiences. Customised walkthroughs for schools highlight the perspectives of both artists and students showcasing a commitment to promoting creative thinking. Additionally, the Learning Center demonstrated the ongoing efforts to improve visual storytelling and emphasised on the importance of symbolism in art interpretation. In FY 2022-23 and 2023-24, total number of participants were **190 across 8 art workshops and 4** walkthroughs organised.⁵⁴

Overall, these initiatives positively enhanced educational outreach making art accessible and meaningful in various learning environments.

- Make at MAP: The 'Make at MAP' series involves presenting artwork to visitors and encouraging them to interact with it. Individuals then start thinking, responding, and creating art of their own, which they can take back home. This process of thinking, responding, and creating one's work has added a unique dimension to the visitor experience fostering a deeper connection with the art and encouraging individual expression. During the interactions with the museum staff, it was noted that MAP had received positive feedback from visitors regarding the interactive experience facilitated by the museum which can be attributed to MAP's continuous engagement with the audience. For example, one of the 'Make at MAP' sessions received feedback to make the sessions longer, and the feedback was incorporated (it was half an hour earlier and now has been extended to longer durations). In FY 2022-23 and 2023-24, total number of participants were 243⁵⁵ across the different events organised.
- Summer at MAP: 'Summer at MAP' was a programme for kids which was organised with an objective to create a fun learning experience for children, as this is the age when they learn most effectively. As informed by the Director of Museum of Art and Photography recognising the prevalence of technology in children's lives efforts are being made at MAP to explore innovative ways to communicate in the language of digital natives⁵⁶ as studies have shown that young people prefer learning through videos. Hence, MAP deployed interactive screens and as a digital media museum from its inception, MAP leveraged its experience to adapt and create meaningful learning experiences for children. Initially planned for one day, the children found it so engaging that they expressed a desire to attend for additional days. Their enthusiasm made learning enjoyable and educational. In FY 2023-24, total 73 students⁵⁷ were benefited.
- Global Outreach: MAP's digital initiatives and collaborations have allowed it to reach a global audience, transcending geographical boundaries. The virtual museum experience and exhibitions on online platforms like Google Arts and Culture and digital engagement through social media have expanded MAP's impact beyond its physical space. Total 39 exhibitions⁵⁸ were organised till date.

As noted during the interactions with the museum staff, MAP's commitment to cultural exposure extends globally. Geo-facilitators⁵⁹ from various cities contributed diverse perspectives to art appreciation highlighting MAP's influence in helping tourists comprehend and enjoy art.

6. Addressing Local Cultural and Artistic Interests

While interacting with different stakeholders it was noted that **during Covid-19 pandemic a lot of artists' communities** (artisanal communities, craft communities, etc.) were going through a very difficult time. So, **MAP's team members came together and contributed an amount of INR 2,00,000 to the weavers' community.** Further, MAP decided to help new, mid-level and younger artists who were struggling to survive as it was difficult for them to even pay their rent. So, MAP offered and issued about 20 grants of INR 50,000 **each** to the artists who applied for this grant offering by MAP. This collective impact was only possible due to the support from the Infosys Foundation and other donors towards setting up this institute and providing a platform to such sections of the society.

As per the Director of MAP, the institute also **aims to provide guidance and mentorship to the artist community** especially to those who may not just need monetary assistance. Many emerging artists look to

⁵⁷ Source: Information received over email from MAP

⁵⁴ Source: Information received over email from MAP

⁵⁵ Source: Information received over email from MAP

⁵⁶ Digital natives are people who have grown up under the ubiquitous influence of the internet and other modern information technologies.

⁵⁸ Source: Information received over email from MAP

⁵⁹ Global network of facilitators



institutions like MAP for support, guidance, and input. So, now in response, MAP is planning to offer mentorship to young artists from various art colleges across the city.

My collaboration with MAP, particularly through the Visible/Invisible programme has been instrumental in elevating my visibility as an artist. The unique focus on creating art forms accessible to both visually abled and visually challenged individuals has not only captured diverse audiences but has also positioned my work in a distinctive light.

Being part of an exhibition that emphasises touch and sensory experiences has broadened the reach of my art. MAP's commitment to inclusivity and its proactive support in guiding artists have played a crucial role in showcasing my work effectively.

- As shared by one of the artists during interaction

The current exhibition, 'What the Camera Didn't See' in collaboration with Pink City Studio on miniature paintings showcased a **commitment to merging traditional and contemporary styles**. Similarly, a renowned artist's commissioned works **breathe new life into the traditional art of miniature painting ensuring its preservation and introducing it to a broader audience**.

The prospect of having my work in the permanent collection at MAP and being exhibited repeatedly is an achievement for any artist. It not only adds value to the artist's portfolio but also contributes to the museum's vision of showcasing diverse and contemporary works.

- As shared by one of the local artist during the interaction



Figure 93: A still from the 'What the camera didn't see' exhibition





8.5.3. Sustainability and Revenue Generation for Museum Operations

As noted during the interactions with the Director of Museum of Art and Photography, **MAP sustains its operations through a combination of support from patrons (donors), CSR funds and diverse revenue streams** including income from the museum shop, restaurant, and venue rentals for programs. While the institution explores various avenues to raise funds, such as book and merchandise sales, etc., it faces challenges in generating substantial revenue from ticket sales or the restaurant as they are managed by external entities and MAP only receives a percentage of these earnings making it insufficient for the long-term sustainability of the Museum. Considering global models of established museums their longevity is often supported by government or private patronage.

As informed by Museum staff, sustainability in the Museum's operations is ensured by the dedicated efforts of the conservation team. The conservation team undertakes the work of restoration and conservation. MAP also undertakes free of cost restoration for many artworks not even owned by the museum. Besides, MAP has an acquisition committee that follows a strict policy for acquisition. Once acquired, every artwork goes to the collection, and the conservation team prepares a condition report when they first receive a collectible. The collection team at MAP diligently manages and curates the extensive collection which currently comprises an over 60,000 artworks. They maintain this collection by coordinating with artists and photographers to ensure its preservation and accessibility to the public.

Regular training sessions for maintenance vendors, adherence to various processes and ISO standards, and the establishment of robust disaster recovery procedures demonstrate a commitment to maintaining the Museum's integrity and longevity. Recognising the significance of museum upkeep, continuous efforts and proactive measures are in place reflecting a sustainable approach to the institution's preservation and maintenance of the art collection.

8.5.4. IRECS Analysis

Basis the interactions with key stakeholders and desk review of the project report, the **impact of this project** was also assessed on the IRECS (Inclusiveness, Relevance, Effectiveness, Convergence, Sustainability) framework parameters. The IRECS analysis summary has been presented in below table:

Parameter	Assessment from study
Inclusiveness	• By tailoring programmes to be accessible and warm to people of all ages, abilities and cultural backgrounds this Museum has created a space where everyone feels represented and engaged. It has resulted in a positive impact on diverse demographics. This ongoing effort towards inclusivity has led to increased participation and a more vibrant and diverse visitor community.
	 Notably, the incorporation of Braille at all physical spaces within the Museum, organisation of International Week of the Deaf programme, incorporation of the Indian sign language, quiet rooms for neuro-divergent individuals, efforts to engage the LGBTQIA community and the active involvement of people with disabilities among the staff further solidifies and showcases MAP's dedication to creating an inclusive space for all that is accessible to everyone. In FY 2023-24, total number of participants (including Deaf) were 230 across 4 days (one event) organised.
	 MAP also incorporates tactile works in all exhibition spaces providing people with disabilities with different kinds of sensory experiences.
	 MAP has undertaken active engagement with various communities through transformative inclusive programs, exhibitions like 'Visible/Invisible' addressing gender issues. Total 27,449 participants were benefitted from FY 2022-23 and FY 2023-24.
	 The introduction of the Bloomberg Connect App enriched visitor interaction by providing detailed information on various art pieces. The app is available in

Table 11: IRECS Analysis



Parameter	Assessment from study		
	multiple languages including English and Kannada and caters to the local audience. Also, for those who cannot read and write an audio guide is available in multiple languages. In FY 2022-23 and 2023-24, total number of audio guide users were 383 and the total number of users of the app were 16,903 with average number of visitors ~1,408 per month . In this regard, it has been effective in facilitating a more inclusive experience.		
Relevance	 The sustained engagement of diverse audiences over time, as evidenced by continuous participation in online programs and exhibitions highlights the project's ability to maintain relevance. 		
	• MAP's relevance is highlighted in its responsiveness to the community's needs especially during the Covid-19 pandemic. This museum contributed to the well-being of artists' communities by providing financial assistance and grants. This support was crucial for both weavers and struggling artists at the time when they needed the support. Recognising the challenges faced by artists during the pandemic, MAP provided financial assistance by offering grants including about 20 grants of INR 50,000 to the artists in need showcasing its commitment and being effective in supporting the artist community during the pandemic. This collective impact was only possible due to the support from the Infosys Foundation and other donors which paved the way to establish the Museum.		
	 The Museum's digital initiatives, collaborations, and exhibitions on platforms like Google Arts and Culture have extended its relevance beyond geographical boundaries. Total 39 exhibitions were organised till date. 		
Effectiveness	 The Infosys Foundation funding support along with other funders to support the construction of the new building for MAP benefited 92,997 beneficiaries (cumulative visitors) since its inception in FY 2022-2023. 		
	• The provision of free access to the Infosys Foundation Gallery at MAP has had a positive impact on visitor engagement. Infosys Gallery is a welcoming space for diverse audiences because it does not require tickets. The dynamic gallery, showcasing unique exhibitions (total 8 physical exhibitions till date) on topics like AI and art, mental health and photography alongside miniature paintings attracted considerable footfall demonstrating its effectiveness.		
	 During the Covid -19 pandemic, MAP went for a digital opening of the museum and created CGI workspaces so that people could experience the museum virtually to stay relevant and effective. MAP displayed innovation in engaging with audiences and utilising social media and animation. The museum offered a comprehensive art experience. The incorporation of features like the 3D holograph further enhanced exhibitions by presenting mesmerising 3D photos/holographs. A total of 15 digital exhibitions were conducted till date. 		
	 MAP innovated the concept of 'photo lamping' to address the limitations of physical Museum visits during the pandemic. Through DIYA app, it enabled individuals to engage remotely with artifacts coupled with enabled access to the Museum's offerings despite restrictions on physical visits. In FY 2022-23 and 2023-24, total number of participants were 52,313 with average number of ~5,231 every month. 		
	 Celebration of the International Day for Sign Language showcased MAP's transformative impact generating widespread attention and positive social media buzz. 		
	 Effectiveness of MAP's programmes is underscored by positive feedback from visitors, especially regarding the interactive experiences offered. The success of initiatives like the 'Make at MAP' series, extended workshops and the impact on diverse demographics signifies the Museum's effectiveness in delivering 		





Parameter	Assessment from study
	engaging and educational content. In FY 2022-23 and 2023-24, total number of participants were 243 across the different events organised.
	 MAP engaged with schools through school group interactions. In FY 2023-24, total number of participants were 1,234 across 21 art workshops and 18 walkthroughs organised. Total 27 schools were engaged in group interactions.
	 Initiatives like 'Journeys Through Art' contribute significantly to fostering critical and creative thinking within the curriculum, enriching the educational experience for diverse audiences. In FY 2022-23 and 2023-24, total number of participants were 190 across 8 art workshops and 4 walkthroughs organised.
Convergence	 Support from the Infosys Foundation for the MAP aligned with the government's efforts towards promoting art and culture, thus, making it convergent to existing government efforts.
	• Collaborative initiatives are undertaken by MAP with various organisation for the cultural and educational sectors. For example, partnering with the Welcome Trust for the Mindscapes programme brings art therapists for workshops on wellbeing aligning with a broader societal focus. The collaboration with the ReReeti Foundation aims to unite Indian museums for enhanced accessibility reflecting a collective effort.
	 Additionally, partnerships with Artreach India and WizKids highlight a joint commitment to bringing art education to the children. MAP's collaborations align with broader cultural and societal goals showcasing a collective commitment to mental health, accessibility and art education. Total 6 online workshops were organised.
Sustainability	 While CSR funds and revenue streams like the Museum shop contribute to operational sustainability the institution recognises the need for patronage and diverse funding sources for long-term viability.
	• Sustainability in the Museum's operations is ensured by the dedicated efforts of the conservation team. The museum ensures sustainability through regular vendor training, adherence to ISO standards and robust disaster recovery procedures. Recognising the importance of Museum upkeep, continuous efforts and proactive measures are taken reflecting a commitment to long-term preservation.

8.6. Alignment to the Infosys Limited's CSR policy and the UN SDGs

The project also **aligned with Infosys Limited's CSR policy** which mentions **Art and Culture as one of the CSR** focus **areas** for Infosys Limited. The project is also aligned with Sustainable Development Goal (SDG) 4.⁶⁰: **SDG 11 of 'Sustainable Cities and Communities'** emphasis to **make cities and human settlements inclusive, safe, resilient and sustainable**. By addressing the challenges in preserving and promoting cultural heritage through collaborative partnerships this project has contributed to strengthen efforts to protect and safeguard the world's cultural and natural heritage.



8.7. Study Limitation

• Scope Definition of Outcomes: The MoU signed between Infosys Foundation and Art and Photography Foundation did entail the expected outcome of this project. Further, activity wise output metric in the MoU would have helped in conducting impact assessment more effectively which was currently not part of the MoU.



⁶⁰ Source: https://sdgs.un.org/goals



Following case stories were gathered during the interactions held with visitors:

Case Story: Journey of Inclusion

A visually impaired woman with an immense love for art in June 2023 got to know about MAP through a friend. She attended a special conference for the first time when she visited MAP. Although she couldn't explore the entire Museum during the conference, she visited the museum again on her birthday to fully experience the art and enjoy herself. During her second visit, she was warmly greeted by the museum staff, who guided her through the exhibits with detailed descriptions of each artwork. Through their thoughtful narration she felt as though she could see the art with her mind's eye, experiencing its beauty and intricacy in a whole new way.

One of her favorite experiences at MAP was listening to their special recordings. With captivating narrations and immersive music, these recordings brought epic tales to life transporting her to distant lands and captivating her imagination.

Even during the Covid-19 pandemic, MAP didn't let her down. MAP offered online workshops and presentations, especially about Mahabharata and Ramayana with music and arctic descriptions which were like a fantastic story including sign language interpretations making art accessible to everyone, regardless of their physical abilities. She appreciated the efforts that MAP put into ensuring that she could continue to engage with art from the comfort of her home. Her journey at MAP wasn't just about experiencing art, it was about feeling seen and included. Despite her visual impairment, MAP made her feel welcome and valued, showing her that art knows no boundaries. Through their innovative approaches and genuine care MAP continues to redefine what it means to make art accessible to all.

Case Story: A Father-Daughter Adventure at MAP

A local resident and the father of a daughter discovered this cultural gem through social media. Drawn by MAP's vibrant content they eagerly explored the museum uncovering a deep commitment to inclusion and embracing futuristic digital experiences from immersive 3D shows to interactive displays and a treasure of historical photographs.

Despite not being great with technology, the father found himself captivated by MAP's ingenious fusion of ancient culture with cutting-edge technology. The Infosys Foundation Gallery, especially the impactful 'Hairy Legs' exhibition, left a deep mark on their experience. Initially puzzled by its placement, the narrative behind 'Hairy Legs' prompted deep reflections on societal realities and sparked meaningful conversations.

As his daughter asked numerous questions about society and women, the father saw an opportunity for enriching conversations with his family using art as a medium to teach important lessons. This unexpected dialogue deepened their bond and enhanced their understanding of societal issues. As per the visitor, MAP is not just a museum but a cultural sanctuary, contributing to Bengaluru's cultural landscape and solidifying its role as a catalyst for art, culture, and transformative family connections.





9. Project 6: Vidya Ganga

9.1. Background

The COVID-19 pandemic trigged widespread closure of schools in India. As per UNICEF India, more than 247 million children enrolled in elementary and secondary schools were affected, particularly those in rural areas. Even before the onset of the COVID-19 pandemic. internet access was limited to only 1/4 of households in India highlighting a major urban-rural disparity in connectivity.⁶¹ In Rural India, government schools are the primary source of learning and hence, closure of these government schools added to already existing challenges such as economic insecurity, lack of access to digital infrastructure and the absence of quality learning experiences.

9.2. About the Project

The Infosys Foundation has undertaken a diverse range Figure 94: States impacted across India of CSR projects aimed at advancing educational development. One such CSR project is 'Vidya Ganga' which aims to ensure continuity of learning for rural students bridging the access to education gap among the students.

The project was launched in 2020, amidst the pandemic to harness the power of technology and to ensure uninterrupted learning of students from rural areas, covering 9 states namely Andhra Pradesh. Bihar. Jharkhand, Karnataka, Maharashtra, Rajasthan, Tamil Nadu, Uttar Pradesh, and Manipur (Figure 95).

The project was implemented by eVidyaloka Trust with the following objectives: 62

- To lift crores of children by giving them the • education and skills to participate in the economy.
- Connect students and teachers, with multimedia content resulting in learning for everyone anywhere, anytime.
- Initiate grassroots level changes by creating livelihood for community connectors.

This project further aims to provide access to quality education for children studying in government elementary schools in rural regions, through its Digital School Program which works on a multi-mode delivery including (a) Digital school set-up in the community, (b) Live classroom sessions, (c) Recorded ready to consume content, (d) Workbooks & worksheets and (e) Teach Through Television (TTT).

Over 15.000 content modules were developed and uploaded in the app for the students between grades 5-8 to access anytime. This covers multiple state boards in different languages. The project had a **reach of** 45,000 children in 275 digital schools and 21 lacs through teach through television. Accordingly, the total multimodal reach for beneficiaries was 21.45 lacs.63 There was no fees associated with gaining access to the educational content on Vidya Ganga's e-learning platform.

62 Source: Data received from eVidyaloka Trust





95

⁶¹ Source: <u>https://www.unicef.org/india/press-releases/covid-19-schools-more-168-million-children-globally-have-been-completely-closed</u>

⁶³ Source: Project document received from Infosys Foundation



A schematic representation of project specifics is depicted as follows:

Figure 95: Schematic Representation of Project Specifics



9.3. About the Implementing Partner

Established in 2011, eVidyaloka Trust (eVidyaloka)⁶⁴ is a not-for-profit organization that **focuses on transforming the educational landscape of rural India**. eVidyaloka creates digital classrooms for children in remote villages, with the support of local communities and volunteer teachers from across the globe. With standardized lesson plans and teaching aids for a consistent learning experience, the children from government schools receive quality education for a promising & rewarding future.

9.4. Method of Impact Assessment

PW conducted the impact assessment study to evaluate the impact that have emerged since the project's implementation. The process began with a **kick-off meeting with the Infosys Foundation and eVidyaloka team** to gain an understanding on the nature of support provided under the project and further align on any additional requirements for commencing the assessment. Following the meeting, PW team **received a set of project documents** from Infosys team which consisted of the following:

- Memorandum of Understanding (MoU) signed between Infosys Foundation and eVidyaloka Trust
- Summary information document describing project progress since its inception
- Proposal to Infosys highlighting the need, project interventions and benefits over a period of time
- Project closure report summarising the project achievements till date in line with activities
- Annual Report 2020-21 providing overall landscape of project activities
- List of beneficiaries

PW team **began the desk review** based on the project documents received to design the assessment framework and finalise the key stakeholders for the interactions. In alignment with the Infosys team, the team worked on the development of a **structured qualitative and quantitative methodology** for capturing stakeholder opinion and feedback.

Mixed methodology (quantitative and qualitative research methodologies) was deployed to undertake the impact assessment study. The quantitative study focused on generating insights and evidence related to the current and expected impact. The qualitative data was leveraged to translate observations, perspectives, and experiences into valuable understandings of the actual impact. In addition to the quantitative research techniques such as surveys, qualitative research methods like Focus Group Discussions (FGDs) and Indepth Interviews (IDIs) were also deployed.

After development of the methodology, **key stakeholders were identified and tailored tools were prepared for each stakeholder** to guide the interactions with them. Project benefitted 21.45 Lakhs beneficiary students



⁶⁴ Source: https://www.evidyaloka.org/



during the project period. Hence, a sample of 271 was calculated at 90% confidence level and 5% margin of error. Further the sample was representatively divided among students from different annual years and states based on the various factors such as aspirational district and the geographical spread. The school level samples for quantitative survey conducted are as detailed in the following table:

Table 12: School wise distribution of sample size

State	District	School Name	Sample size
Andhra	YSR Kadapa	APSWRS/JC, Kondapuram Digital School	9
Pradesh		APSWRS/JC, Chinnachowk Digital School	34
		APSWRS/JC, Madakalavaripalli AT TGP Camp Baddvel Digital School	35
		APSWRS/JC, Rajupalem Digital School	34
	Vizianagaram	APSWRS/JC, Nellimarla Digital School	30
		APSWRS/JC, Badangi Digital School	30
		APSWRS/JC, Cheepurapalli Digital School	30
	Visakhpatnam	APSWRS/JC, Kokkirapally Digital School	14
		APSWRS/JC, Megadrigadda Digital School	13
		APSWRS/JC, Srikrishnapuram Digital School	13
Jharkhand	Giridih	Jamua - Hira Digital School	6
		Apna Digital School	10
Karnataka	Dharwad	Kalluru Digital School	7
	Koppal	GHPS Manneral Vajragalu Digital School	6
Total			271

The qualitative evaluation framework of the study was as follows:

Figure 96: Qualitative Research Design for the Study



^Subject matter expert was the content head of eVidyaloka Trust who played an important role in developing the content under this project.



After finalising the research methodology, an **on-site visit to eVidyaloka's project locations** was conducted to administer tools with the respective stakeholders. **Total nine interactions** were completed during the visit whereas **five interactions** were completed virtually as per the qualitative sampling plan provided in Figure 97.

The data collected through the quantitative survey and the responses from the qualitative interactions were then analysed along with secondary/desk research findings to arrive at detailed findings (to understand the impact of the Vidya Ganga project) as depicted in the next section on 'Analysis & Findings'.

9.5. Analysis & Findings

This section describes the key findings emerged from our interactions with the stakeholders:

9.5.1.Challenges before the project

eVidyaloka was working in the education sector to address the problems of teacher shortage and the quality of resources available for the students in the remote rural areas, especially in the government schools through the **Digital Classroom Program**. During the discussion with project stakeholders, it was noted that:

- Digital classrooms were setup inside the classroom to run online live sessions. However, due to the closure of schools at the time of Covid-19 pandemic, it was not possible to continue the program in the same way.
- During pandemic, students did not have any other medium to learn, resulting in loss of interest in studies. School teachers were not able to teach the students, leading to the possibility of students dropping out from formal education. The same issue was raised by the parents during the interactions, as they did not have any other option for continuing the education of their children.

9.5.2. Profile of the respondents

- Majority of the respondents (26%, n=271) were from 9th class, followed by 23% respondents from 8th class (Figure 98).
- 81% (n=271) of the of the respondents were female students.

9.5.3. Summary of the Impact Created

- 1. Access to quality education through online medium:
- During the survey (n=271), the students reported that prior to this project, the primary method of learning in their schools was traditional learning (Board and Chalk) method (59%) (Figure 99).
- 98% students (n=271) reported that the content provided was accessible to all students in their school.
- Further, almost all students (97%, n=271) reported that they utilised different ways (mobile application, broadcast of learning content over television, etc.) of consuming the ready-toconsume learning content (Figure 100).

Figure 97: Distribution of students according to standard (n=271)



• 5th • 6th • 7th • 8th • 9th • 10th

Figure 98: Mode of education in school prior to the project (n=271)





Figure 99: Different Ways of Utilising the Content (n=264)



*Multiple Coding Question, Responses may add up to more than 100%

- Post the Covid-19 pandemic, when the schools were reopened, the focus was again shifted to Digital Classroom setup. In the Digital Classroom setup, the online classes were conducted by the volunteer teachers. These classes were held during the regular school hours and within the school premises. All the students surveyed (n=271) reported that a digital classroom was setup in their school. Also, all other services like recorded videos, workbooks and worksheets, etc. were continued to be made available for the students.
- Students further reported the **utilisation of live classes (83%)** as one of the major benefits followed by recorded videos (62%) (Figure 101).



Figure 100: Benefits Utilised by the Students (n=271)

*Multiple Coding Question, Responses may add up to more than 100%

- The access to quality education was further strengthened by provision of attending live classroom sessions in the schools. It was noted that each subject was taught one hour each for two days in a week.
- If the student missed the class due to any reason, they had the access to recorded sessions and could go through the sessions whenever feasible.

Basis the responses received from students on different benefits availed under the project (Figure 101), the subsequent sub-sections depict the analysis of such benefits using corresponding sample size (n) as mentioned below:

- Live classes (n=225 i.e. 83% of 271)
- Recorded videos (n=169 i.e. 62% of 271)
- Regular exams/ assessments (n=148 i.e. of 55% of 271)
- Workbooks and worksheets (n=146 i.e. of 54% of 271)
- Doubt sessions (s)/ feature (n=136 i.e. of 50% of 271)



2. Enhanced learning experience for the students:

Relevance of the content:

- Recorded videos, workbooks and worksheets, live classes, assessments, and doubt sessions were all developed and conducted in the vernacular language for the students. This has helped the students to be comfortable with learning as they could easily learn in their local language.
- Further, the learning content was in alignment to the state boards as the project focussed on augmenting the regular studies of the students. This alignment was helpful for students to consume the content within the structure defined by their board of education and remain focussed.
- Below table depicts the responses received from students on relevance of different benefits availed by them under this project:

Parameter	Live classes (n=225)	Recorded video (n=169)	Workbooks and worksheets (n=146)	Doubt sessions (n=136)	Assessments (n=148)
Vernacular/ preferred language	98%	100%	99%	100%	98%
Alignment with their textbook curriculum	97%	99%	99%	NA	NA
Accommodating regular schedule	92%	NA	NA	NA	NA
Completing their textbook learning	97%	99%	NA	NA	NA

Table 13: Relevance of project benefits

NA indicates that parameter under the assessment is not relevant/ applicable to the corresponding benefit.

Streamlined process of learning:

- To streamline the process of learning, the **students were provided with lesson plan** in alignment with the students' learning objectives. The lesson plan was followed by the teachers and adhered by the students so that regular timetable is followed for students to be aware of the topics to be covered and to plan their studies accordingly.
- In this regard, majority (93%) of the students (n=271) reported that lesson plan was provided to them.
 98% of these students (n=252 i.e. 93% of 271) further responded that the lesson plan was followed by the teachers and adhered by them.
- Almost all (99%) of the students (n=252) reported that the lesson plan aligned with their learning objectives.
- As per the interaction with students, the worksheets provided by Vidya Ganga has been helpful for
 practicing their learnings. The same insight was obtained during the survey, as almost all (99%) of the
 students (n=146) reported that the workbooks and worksheets complement the live classes and
 video lessons.

Resolution of challenges at ground level:

 As per the interaction with students, some of the students faced difficulty in content delivery. The students sitting in the last rows faced difficulty in grasping the content and sometimes due to network





issues, the voice broke during the live classroom sessions conducted by the volunteer teachers. Vidya Ganga team addressed these challenges by incorporating a rotational system, where the students sitting in the last row would move to the 1st row in the next session, students in the 1st row would move to 2nd row and so on. Similarly, an alternative recorded session to live classroom session was provided to the students to further help the students revise their lessons.

- Volunteer teachers mentioned that every student was not having access to mobile to attend the classes during the Covid-19 pandemic, in turn **limiting the live class environment**. They also reported the connectivity issue, and the challenge of background noise. These challenged were addressed by providing the Class Assistants with Wi-Fi dongles to improve connectivity, providing laptop to help students attend the classes using the same.
- The **issue of connectivity** was also reported by the NGO partners which was mitigated by identifying spots (with good network) in the villages. Students were shifted to those spots where they could sit in smaller groups with proper social distancing.

3. Improvement in learning level among students:

Facilitating the improvement in learning through regular assessments:

- Majority (97%) of the students (n=148) responded that assessments were regularly carried out to monitor their progress.
- 97% (n=248) found the lesson plan to be helpful in keeping their study schedule on track.
- As per the interaction with parents, the live classroom learning program along with the worksheets have proven to be impactful in the learning of the students.
- This project has further helped to develop the confidence of the students through live classes and interactive sessions. All the students (n=161) reported feeling more confident in the subjects for which they utilised the project service(s) as compared to the older method of traditional (chalk and duster) school learning.

Bringing positive change among students:

- As per the interactions with volunteer teacher, the project is **bringing change in the lives of the children** by connecting them with these digital learning platforms. **Children enjoy learning online through phones**.
- Following changes were observed by NGO partner among the students:
 - Improved fluency in English
 - Improved ability in solving mathematical problems
 - Being able to perform science experiments
 - Improvement in attendance with students attending the school regularly
 - Improvement in the grades of the students
 - Improved students' participation in competitions
 - Reduced hesitation among students to ask questions
- As narrated by the students, the content in the module has been effective in improving students' overall learning.

Improvement in academic performance:

• The students also reported that their grades have improved because of Vidya Ganga's learning platform as it helps in revising the classroom learnings. They informed that the **live classroom sessions have been**





the most impactful in their educational journey as they feel connected while learning and it helps them understand better.

- As almost all (99%) of the students (n=161)⁶⁵ responded that there was improvement in their school exam results after utilising the project benefits as compared to the older method of traditional (chalk and duster) school learning. This improvement in the students' school exam results showcases the positive impact of the project and displays the project's effectiveness.
- The project enabled them to prepare better for the exams (75%) followed by building understanding on the topics in a better way (74%) as depicted in Figure 102.

Figure 101: Impact on Overall Academic Performance (n=271)



- Better preparation for exams
- Strengthened understanding of the topics
- Developed overall confidence regarding studies
- Increased learning engagement and focus
- Improved remembrance of the topics

*Multiple Coding Question, Responses may add up to more than 100%

Improvement in daily study habits and increased interest:

• The students (n=161) also reported that the **project impacted their daily study habits** as compared to the older method of traditional (chalk and duster) school learning as it made them more focussed (89%), excited to look forward to studies (68%) and more disciplined (54%).

1%

Figure 102: Project's Impact on Daily Study Habit (n=161)



*Multiple Coding Question, Responses may add up to more than 100%

As per the interaction with parents, the students have developed interest towards learning from Vidya Ganga's e-learning platform. Similarly, as per the interaction with the school teachers, these digital classes have developed interest in students towards studies. Parents of these students also mentioned that their children's learning level has improved due to Vidya Ganga's learning platform. It has boosted their self-confidence and technological knowledge as well, resulting in generating impact of long-term interest among the students regarding education. Majority (99%) of the



⁶⁵ 161 students were using chalk and duster method for the study purpose before the project i.e. ~59% of 271.



students (n=271) responded that the project has instilled a long-term interest among them towards education and learning.

• This development of long-term interest among the students regarding education and learning shows the effectiveness of the project implementation. Also, as per the interaction with the students, they did not witness any drop out in between the course.

4. Positive student perception regarding different project aspects:

Basis the survey responses, it became evident that the students have a positive overall perception of the project. Following results were obtained⁶⁶ depicting the **effectiveness of the project**:

Project Component	Experience Rating		
	5	4	3 or less than 3
Live classes (n=225)	84%	13%	3%
Recorded videos (n=169)	73%	22%	5%
Workbooks and worksheets (n=146)	62%	29%	9%
Doubt session(s)/feature (n=136)	76%	21%	3%
Regular assessments (n=148)	68%	29%	3%
Mobile app interface (n=93)	53%	38%	9%
Learning content on mobile (n=93)	53%	37%	10%
Learning content on television (n=206)	77%	16%	7%
Class Assistant support (n=271)	85%	10%	5%

5. Synergising stakeholder engagement and capacity building:

The project garnered support from varied stakeholders before and during its implementation. eVidyaloka synergised with these different holders to implement the project and also helped in capacity building of some of the stakeholders before engaging them for the content delivery. Following table depicts the impact created by this project on the lives of such as stakeholders:

Table 14: Engagement and Impact on Project Stakeholders

Parameters	Type of stakeholders			
	Volunteer teachers	Partner NGOs ⁶⁷	Class Assistants	Parents
Role in project	Responsible for the content delivery	Responsible for implementing the project activities in geographies where eVidyaloka has limited presence.	Responsible for conducting digital classes (including physical setup, session plan roll out etc.)	Continue motivating and supporting their children

⁶⁶ On a scale of 1 to 5, with 1 being poor and 5 being excellent



⁶⁷ Samajik Parivartan Sansthan' and 'RISE' NGO

Parameters	Type of stakeholders			
	Volunteer teachers	Partner NGOs ⁶⁷	Class Assistants	Parents
Engagement model	Capacity building training from eVidyaloka Trust	Helps them improve their liaison skills, increase experience in the education field and expand their network	Selected from the local community in and around school (usually alumnus of school)	Engagement through parents- teachers meetings
Overall impact created	98% of the students (n=225) reported volunteers to be interactive and inclusive during the live classes.	Reaching out to most underserved section of the society to create the holistic impact of the project	65% students (271) reported that these assistants motivate them in their studies, followed, supporting them in doubt clearing sessions (61%).	Almost all (97%) of the students (n=255) highlighted the response of their parents on the introduction of this project intervention in school was positive.

Figure 103: Support of Class Assistant (CA) in students' education (n=271)



Regularly motivating in studies

- Helped in organising doubt clearing session(s)/using doubt feature on app
- Helped in organising regular assessments
- Helped/coordinated in following the lesson plan

*Multiple Coding Question, Responses may add up to more than 100%

9.5.4. IRECS Analysis

Basis the interactions with key stakeholders and desk review of the project report, the impact of the project was also assessed on the IRECS (Inclusiveness, Relevance, Effectiveness, Convergence, Sustainability) framework parameters. The IRECS analysis summary has been presented in below table:

Table 15: IRECS Analysis

Parameter	Assessment from study
Inclusiveness	• The project displayed inclusiveness as it is being implemented in rural areas and catering to the state government schools.
	• All the project aspects are available in vernacular make it easily accessible to the students from regional background.
Relevance	 The project displayed its relevance as during the Covid-19 pandemic and the subsequent school closures, the students were not able to continue their



Parameter	Assessment from study
	 regular education and the project provided an opportunity for students to continue their studies. The project also displays its relevance to address the issue of schools with teacher shortage, as in such cases the project helps to continue the education for the subject.
Effectiveness	 The lesson plan was helpful in keeping the study schedule of the students (97%, n=248) on track. The project's live classes and interactive sessions contributed to students' increased confidence as all the students(n=161) reported feeling more confident in the subjects for which they utilised the project service(s). Students also reported improvement in their grades because of Vidya Ganga's learning platform with almost all (99%) of the students(n=161) reporting improvement in their school exam results after utilising the project service(s). The project helped the students (n=161) in their overall academic performance as compared to the older method of tradition as it helped them prepare better for the exams (n=75%) amongst other benefits.
	 The students (n=161) reported that the project impacted their daily study habits positively as compared to the traditional method (chalk and duster) of school learning by making them more disciplined (54%) and focussed (89%). Majority (99%) of the students (n=271) responded that the project has instilled a long-term interest among the students in education and learning. Students witnessed no dropouts in between the course.
Convergence	 The project displayed convergence with governments' education initiatives as it aimed to address the discontinuity in education of children caused by Covid-19 pandemic. The project also aimed to address the challenge of teacher shortage in government schools.
Sustainability	 At the time of exit, eVidyaloka will leave the infrastructure in the custody of the school administration and also leave the access of the digital learning platform open for the schools so that the schools can look after the maintenance of the infrastructure and continue to utilise the learning services on their own. This ensures the sustainability of the project offering even after eVidyaloka team exits the schools. There was no fee associated with gaining access to the educational content on Vidya Ganga's e-learning platform and this made the access of the content sustainable for the students.

9.6. Alignment to the Infosys Limited's CSR policy and the UN SDGs

The project is **aligned with Infosys Limited's CSR policy** which includes **education, as the key CSR focus areas** for Infosys Limited. The project is also aligned with Sustainable Development Goal⁶⁸: **SDG 4 "Quality Education"**, SDG-4 aims to ensure inclusive and equitable quality education, whilst promoting lifelong learning opportunities for all.





⁶⁸ Source: https://sdgs.un.org/goals



9.7. Study Limitations

 Due to mobilisation challenges on the part of implementation partner in two states – Maharashtra and Uttar Pradesh, the samples for those schools were adjusted in other states – Karnataka and Jharkhand where mobilisation was possible.

9.8. Case Stories

Case story 1

Riya (name changed), an alumni student, got associated with Vidya Ganga project when she was in 4th grade, the initiative provided her access to digital learning platform during the COVID period. She shared that during the pandemic when the schools were closed, the only option she was left with was to self-study at home with her textbooks. But through her friends, she got to know about the digital learning programme which was provided by eVidyaloka and Infosys. She came to know that the programme was free which added to her interest and with no further delay she got herself enrolled in the programme. She started attending online classes through the digital learning platform which was facilitated by the class assistant in her village.

Riya's dedication and commitment to her studies shown through as she actively engaged with the digital learning platform. The interactive nature of the platform empowered Riya to ask questions, clarify doubts and participate in online classes with ease. Her teachers also observed her academic performance and praised her for her efforts in adapting to the new learning format.

This enabled her to keep continuity with her studies during the pandemic preventing her to dropout. She shared that even if she missed classes on some days, she has the option to attend those classes through the recorded videos in the application and any doubts that occurred while consuming the recorded sessions, can be uploaded in the app for resolution.

She participated in a quiz competition and won the first position. Grateful for the valuable support and resources provided by the learning platform Riya attributed her success to Vidya Ganga project. She highlighted how the platform's flexibility in terms of recorded videos for missed classes and option to upload doubts for the resolution where instrument to her academic achievement.

Case story 2

Shreya, a student of 5th grade, belongs to a small village of Marewad in Dharwad district. Growing up she had big dreams but with limited access to quality education and resources she often felt that those dreams were out of reach. However, everything changed when she discovered the AI classes offered through the Vidya Ganga learning platform. She shared that in her village there were no options to learn about artificial intelligence. But through the digital learning programme of Vidya Ganga, she was able learn about AI along with English, mathematics, and computer subjects.

When she first logged into the digital learning platform she was filled with excitement and curiosity. As she explored the world of artificial intelligence through the live classes, she could envision endless possibilities and potential of AI. As she delved deeper into the classes, her passion for artificial intelligence grew stronger with each passing day. She said that the AI classes provided by vidya Ganga weren't just about acquiring knowledge, but it has empowered her to dream again. It gave her the opportunity to learn from her own village without having to go to another city to learn. She aspires to become a scientist in the future using artificial intelligence to solve some of the world's most pressing challenges especially in the areas of agricultural advancement.

Shreya said that "I am grateful to the opportunity provided by Vidya Ganga to explore my passion for artificial intelligence from my own village".





10. Project 7:Construction of multipurpose hall for 200 girls

10.1.Background

In India, significant strides have been made in education and healthcare, however, gender-based inequalities continue to pose challenges. Issues like domestic violence, exploitation, and limited access to resources are widespread, impacting women across diverse socio-economic backgrounds. The Government of India, through various schemes, extended a helping hand to women especially Devadasi, sexually exploited women, and destitute women, aiming to uplift their lives.⁶⁹ **The Karnataka State Women's Development Corporation (KSWDC)** implements the Devadasi Rehabilitation Programme, offering education, vocational training, financial aid, and support for their integration into society. There are other schemes such as **One Stop Centers (OSCs)**⁷⁰ **and Swadhar Greh**⁷¹ **which provides comprehensive support to women facing violence.** However, despite the government's efforts, -impacted groups are grappling with social and economic hardship.

10.2. About the Project

The Infosys Foundation has been actively engaged in Corporate Social Responsibility (CSR) projects with a focus on **education and women empowerment**. One such project is with the Shakthidhama, wherein the Infosys Foundation worked towards the **construction of multipurpose hall of 8,000 square feet at Shakthidhama center**. This initiative was specifically designed to **benefit 200 girls, aligning with the Foundation's commitment to fostering educational opportunities and empowering women**.

A schematic representation of the project specifics is depicted below:

 Project
 Project
 Project
 Project

 200 Girls
 Shakthidhama Center,
Mysore Karnataka
 FY 2020-2023
 INR 2.50 crore

Figure 104: Schematic Representation of Project Specifics

10.3. About the Implementing Partner

Established in 1997, Shakthidhama had a primary focus on rehabilitating women, especially those who were victims of sexual exploitation or had become destitute due to various reasons. The primary goal was to provide immediate support and a safe environment. This center expanded its efforts to include counselling and psychological support to empower women economically and fostering self-reliance. The center shifted its attention to traditional sex workers from Devadasi families. The objective was to bring girls from Devadasi backgrounds into the center, offering them education and empowering them to shape their destinies. At present, center is committed to the education and rehabilitation of orphan girls, tribal girls, and those from disadvantaged families **aged 9 to 16 years and beyond**. The center has a school running within the campus along with residential hostels for the rehabilitated girls.



⁶⁹ Source: <u>https://kswdc.karnataka.gov.in/13/rehabilitation-of-devadasi-women-/en</u>

⁷⁰ Source: <u>https://wcd.nic.in/schemes/one-stop-centre-scheme-1</u>

⁷¹ Source: https://www.india.gov.in/spotlight/swadhar-greh-scheme


As part of Shakthidhama's endeavor to serve the underprivileged, Infosys Foundation has supported the construction of a multipurpose hall, a dining hall (including cooking and cleaning area), and a digital library at the center as part of an Infosys Foundation block. These facilities aim to serve 200 resident girls at a time to foster experiential learning and a sense of collaboration and teamwork amongst the resident girls while also providing a hygienic space for dining. The facility was constructed and handed over to the Shakthidhama in April 2022 and Shakthidhama has taken the responsibility of operating and maintaining the infrastructure ever since. However, during the survey, team noted that the current occupancy of center is 170 girls which was considered as the universe for the study.

Figure 105: Project Location - Shakthidhama Center





10.4. Method of Impact Assessment

PW carried out the impact assessment study to evaluate the impact that have emerged since the project's implementation. The process started with a kick-off meeting with a representative from Shakthidhama and the Infosys Foundation to better understand the project activities and to further assess and coordinate on any additional requirements before the assessment. After the meeting, PW team also reviewed the following documents provided by the Infosys Foundation:

- **Memorandum of Understanding (MOU)** and addendum signed between Infosys Foundation and Shakthidhama.
- Handover Letter describing the progress of project activities.

The impact assessment study followed a mixed method approach to evaluate the impact of this project. The quantitative tools and the data points focused on generating insights and evidence related to the current and potential impact. The qualitative methods and the data gathered thereon, was leveraged to translate observations, perspectives, and experiences into valuable understandings of the actual impact, while corroborating the findings from the quantitative study.

After the development of the methodology, **key stakeholders were identified** and **tailored research tools were prepared for each stakeholder** to guide the interactions with them. Further, the sample for the quantitative survey was finalised basis the information provided within the project documents. A **universe of**





170 girls was selected and further the sample of 105 was calculated based on 90% confidence level (CL) and 5% margin of error (MoE) to arrive at a statistical significance. It was noted that out of 170 girls, 50 girls were below the age of 10 years, hence, were not deemed fit for the survey. Out of remaining 120 girls, 12 girls were not present at the center at the time of interactions. The team covered all of the remaining 108 girls, thereby meeting the sample size of 105. Also, 4 qualitative interactions were planned to be conducted including 1 FGD with the resident girls and 1 IDI each with Shakthidhama representative, center manager, and the Infosys Foundation team as depicted in the below Figure:

Figure 106: Evaluation framework for the assessment



An **on-site visit to Shakthidhama** was conducted on December 10th, 2023, to administer tools with the respective stakeholders. Post the data collection, data entry, cleaning and analysis was carried out to arrive at the key insights from the impact assessment study. Responses were then analysed along with corroboration with secondary/desk research findings to arrive at detailed findings as depicted in the next section on <u>Analysis and Findings</u>.

10.5. Analysis & Findings

Below section depicts the key findings emerged from the project in relation to challenges before the project and impact created by the project:

10.5.1.Challenges before the project

The Shakthidhama Center has been serving the vulnerable population of disadvantaged women and girls, however, due to operational and infrastructural limitations, there were a few challenges within the center that had to be overcome. Stakeholders, during the visit to the center informed the research team that:

 One of the major concerns was lack of a dedicated space / hall to conduct cultural programmes or cocurricular activities. It is evident that these activities, along with sessions on leadership and physical and mental wellbeing are also extremely important for the overall development of the resident girls. However, due to lack of a dedicated space for conducting such sessions, the center had to rely on open space within the campus, wherein the programmes would often have to be cancelled due to inclement weather conditions.

"There was no dedicated space for cultural activities at Shakthidhama. The existing dining hall was insufficient to accommodate the growing number of girls."

- As narrated by Shakthidhama representative during our interaction

- 2. The center also had a smaller dining hall prior to the construction of the new facility. This limited space did not provide ample seating to accommodate all the residents of the facility in one batch. This often led to multiple batches of students being served their meals at different timings. Also, since the facility would get crowded, there was an issue of hygiene within the confined cooking space as well.
- 3. The center is **majorly catering to the educational and vocational needs** of girls belonging to the disadvantaged group of the society. To meet its goals, **it was imperative to have an infrastructure in**





place for a digital library. The earlier library, although useful, is smaller, and cannot cater to the needs of a digital infrastructure to set-up a full-fledged digital space.

10.5.2. Profile of the survey respondents

This section discusses the socio-demographic profile of respondents in line with the key findings emerged from quantitative survey carried out with 108 girls:

- Majority of respondents belonged to the age group of 10-20 years, with 50% of the respondents aged 10-15 years and 45% aged 16-20 years. 5% of the respondents were more than 20 years old.
- 57% of the total respondents (n=108) hailed from Raichur followed by Belagavi (~14%) districts in North Karnataka. It was noted that the women belonging to Devadasi community are primarily concentrated in North Karnataka, with Raichur and Belagavi among the regions with highest concentration of such community.
- 82% of the respondents have been associated with Shakthidhama before 2022, which helps the survey gain retrospective insights as well and understand the changes in the lives of the resident girls since the construction of the Infosys Foundation block in the year 2022.



Figure 108: Place of origin (n=108)



Figure 109: Year of association with Shakthidhama (n=108)



10.5.3. Summary of Impact created

As the project components include construction of infrastructure in the form of a multipurpose hall, a dining hall, and a library, the impact of the project activities has been assessed after taking into consideration the impact of other components (activities) at Shakthidhama as well. Further, during the interaction with the stakeholders present at the center, the research team was informed that the digital library constructed at the center is yet to be functional as Shakthidhama is awaiting fund release from other funding partner(s) to provide the required infrastructure necessary for operationalising the library. The students are still using the older library which was already present on the campus. Hence, the findings do not reflect any impact of the library constructed through the support from Infosys Foundation. This section discusses the impact created by the project activities based on the interactions with the survey respondents and the other stakeholders:

1. Continued quality education for the beneficiaries

 100% of the respondents (n=108) have been going to a school / college post coming to the Shakthidhama center, as opposed to 94% of the respondents (n=108) who were enrolled at an educational institute before coming to the center as well. During the qualitative interaction with the resident girls, it was noted that the quality of education is much better than what they used to receive



Figure 107 : Age of the respondents (n=108)



earlier. Earlier these girls were brought to the center and admitted to different schools. Shakthidhama team noted that the girls faced problems in their earlier schools, so they decided to create their own school. This school provides a platform to these girls to obtain quality education.

- Further, all the respondents mentioned that their academic performance has improved since joining the center, with 15% agreeing that it has improved slightly and 85% reporting a significant improvement in academic performance.
- 90% of the respondents (n=108) have reported that they are now attending the school more often as compared to before, while 10% of the respondents (n=108) indicated that their frequency of attending the school has remained the same. Due to the Shakthidhama School, these girls are regularly attending the classes and the qualified teachers help them improve their academic performance as well, since Shakthidhama can have a better control over the teaching pedagogy within the school."





- 93% of the respondents (n=108) agreed that if they had not come to Shakthidhama center, their education would have been adversely impacted. Close to 3% (n=108) did not agree with this, while close to 5% (n=108) were not sure if their education would have been adversely impacted if they had not come to Shakthidhama.
- 2. All-round development through co-curricular activities
- All the respondents (n=108) agreed that they know of the various co-curricular activities held at the center, while 107 respondents (n=108) had also

participated in these activities. These activities are primarily held within the multipurpose hall at Infosys Foundation block. As per the qualitative discussion with the stakeholders, earlier the cocurricular activities had to be held in open space within the center prior to the construction of the multipurpose hall, often leading to disruptions due to inclement weather.

Figure 110: Infosys Foundation block at Shakthidhama



Figure 112: Frequency of attending school / college since joining Shakthidhama (n=108)



Figure 113 : Adverse impact on education if they had not come to Shakthidhama center







Multipurpose hall established under this project has been used for multiple academic and non-academic activities. 67% respondents (n=107) participated in activities related to "Music and Dance", 65% respondents in "Educational sessions", 60% in "Sports", 34% in "Drama and Theatre", and 32% in "Art and Craft". These activities are held at regular intervals and on days of national importance (such as Independence Day, Republic Day, etc.) providing students an opportunity to showcase and develop their interest in a particular artform. As per the discussion with the stakeholders, Yoga Day celebrations are also held regularly at the center, with Yoga sessions organised on other days as well.

Figure 114: Multipurpose Hall at the Infosys







Multiple choice question, total may not add up to 100%

"The Multipurpose Hall has addressed previous challenges related to outdoor programmes. Weather interruptions during activities are now minimised, thanks to the indoor space provided by the hall. This has resulted in increased reliability and continuity of various events, including training sessions, cultural programmes, and yoga, contributing to the holistic development of the girls."

- As narrated by center manager during our interactions

- The respondents also expressed that these co-curricular activities have helped them in improving certain specific areas of their personality. 58% of them responded (n=107) that these sessions have been helpful in improving their academic performance. 55% of them reported an improvement in their skills around teamwork while 46% believed that it boosted their confidence. 19% reported an increase in confidence, and 8% reported an increase in their leadership skills. This depicts that the utility of these co-curricular activities is more than just providing an opportunity for the resident girls to showcase their talent. It is evident that it also provides a platform which enhances their ability to improve upon some other associated skills as well.
- Further, during the qualitative discussions with the resident girls, it was highlighted that **the multipurpose** hall also provides them an opportunity for group study, which also helps inculcate in them habits of collaboration and teamwork.





Figure 116: Benefits of co-curricular activities (n=107)



Multiple choice question, total may not add upto 100%

3. Access to continuous upskilling opportunities and inculcating leadership skills among girls

- 79% (~85 respondents) of the respondents (n=108) have also been part of leadership programmes. The center organises such programmes with an aim to provide counselling support to the resident girls and inculcate leadership skills among them to ensure that they take up greater responsibilities later in their career. 15% of the respondents did not participate in these sessions.
- Further, the respondents highlighted the benefits of such programmes. 76% respondents (n=85) reported that these programmes helped them to strengthen their leadership skills whereas 35% respondents mentioned that they felt greater self-confidence after these programmes. 27% respondents reported that these programmes helped them to provide valuable guidance for personal development, and 6% respondents believed that these programmes fostered a sense of responsibility within them.

Figure 117: Plaque depicting inauguration of Infosys Foundation block







Figure 119: Benefits of leadership programmes (n=85)



Multiple choice question, total may not add to 100%





4. Increased access and availability of guality of food at the dining hall

Since the construction of the new dining hall at the Shakthidhama center, the space for cooking and dining has also increased resulting in better guality and hygiene. Before this intervention, the dining facility was smaller, which meant that only a limited number of girls could be served meals, that too in a number of batches.

Figure 120: Dining hall at Shakthidhama



Figure 121: Cooking area within the dining hall



"The dining facilities within the dining hall are good. The hall is always clean, and we all eat together. The hygiene is well taken care of. One of the things we like is having meals as a group, and it creates a feeling of community."

Respondents also rated the level of hygiene at the dining hall and their level of satisfaction on the options of food served. Close to 95% of the respondents (n=108) mentioned that hygiene levels in the dining hall were either excellent or good, while 6% were of the opinion that the hygiene was average.

5. Access to safe and secure environment

77% of the respondents of the survey strongly agreed that the center provided a safe and secure environment for its residents. Further, around 16% of the girls agreed with this, while 7% had a neutral opinion in this regard. 76% respondents (n=108) agreed that this sense of security complemented their increased feeling of safety, 42% respondents had an increased sense of trust in the center, and 16% respondents reported enhanced peace of mind.

- As narrated by resident girls during our interactions

Figure 122: Hygiene levels at the dining hall (n=108)







Figure 123: Access to safe and secure environment (n=108)



Figure 124: Benefits of a safe and secure environment within the center (n=108)



Multiple choice question, total may not add upto 100%

Respondents rated both multipurpose hall and dining hall highly as both these facilities on a 5-point scale⁷², the average rating for the multipurpose hall and the dining hall came out to be 4.81 and 4.86 respectively (n=108). This indicates that the resident girls, who are the ultimate beneficiaries are satisfied with the infrastructure, design, and overall usability of both these facilities.

Figure 125: Average rating⁷³ for the multipurpose hall and dining hall (n=108)



 65% of the respondents (n=108) either know or have visited a facility similar to Shakthidhama center in the past. On being asked unique feature of Shakthidhama center, 78% respondents mentioned that safety and security at Shakthidhama is better, while 46% respondents mentioned that cleanliness and hygiene are the differentiating factors. 43% respondents rated the infrastructure at Shakthidhama better, while 41% reported that the quality of food is better.

Figure 126: Awareness on the other Centers similar to Shakthidhama Center (n=108)



Figure 127: Things at Shakthidhama better than other similar Centers (n=70)



Multiple choice question, total may not add upto 100%

⁷² On a 5-point scale (1 being the lowest and 5 being the highest)

⁷³ On a 5-point scale (1 being the lowest and 5 being the highest)



"There are other similar places in and around the area but they're not like Shakthidhama. Unlike those places where you might have to pay to stay, Shakthidhama provides all the services free of cost and is special. It has better facilities, like multipurpose hall, which make it a great place for learning and living. This place is cleaner and more comfortable, making it stand out from the others."

- As narrated by resident girls during our interactions

The respondents were also asked about their likes and dislikes pertaining to Shakthidhama, where, again a majority of the respondents, 72% (n=108) marked Safety and Security as a major aspect. 51% indicated Hygiene and cleanliness, 46% marked food quality, 44% mentioned quality of infrastructure, and 43% highlighted the behaviour of the staff as good aspects of the Shakthidhama Center. 80% respondents (n=108) could not identify any aspect of the center that they would dislike.

72% 51% 46% 44% 43% 1% Behavior of the Safety and Hygiene and Food quality Quality of None of the above Cleanliness infrastructure caretaker / staff Security members

Figure 128: Things you like about Shakthidhama (n=108)

Multiple choice question, total may not add upto 100%

On being asked on their preference towards recommending Shakthidhama to any other girl from the disadvantaged group (on a scale of 5 wherein 1 being least likely and 5 being most likely), the average response from the respondents (n=108) came out to be 4.86. This indicates that most of the respondents would recommend other needy girls to Shakthidhama. This can be attributed to the quality of support that the center provides to these girls.

Average response to the question on likelihood of recommending Shakthidhama to other girls in need. (N=108)

Basis the interactions with the key stakeholders and desk review, **the impact of the project was also assessed on the IRECS framework parameters**. The IRECS analysis summary has been presented in below table:

Table 16: IRECS Analysis

Parameter	Assessment from study
Inclusiveness	• The facilities at Shakthidhama are essentially designed to cater to girls belonging to the most disadvantaged group. The survey respondents also came from various geographies and in particular from North Karnataka districts, where the Devadasi system is most prevalent. More than 70% of the respondents belonged to either Belagavi or Raichur districts from North Karnataka.
	• During the interactions, it was evident that the center accommodates girls from the most disadvantaged groups and provides them with an opportunity to excel in education and further their careers.



Parameter	Assessment from study
Relevance	• The Shakthidhama center aims to cater to a very pertinent problem of education amongst the children from the Devadasi system. This is evidenced from the qualitative discussions with the stakeholders along with corroboration of the same through quantitative data. 71% of the respondents (n=108) of the survey come from Northern Karnataka region, where the Devadasi system is still very much prevalent.
	 93% of the respondents (n=108) to the survey believed that their education would have suffered if they had not been rescued and brought to the center.
	• The stakeholders, during the qualitative interactions, agreed that there were challenges to be overcome even after the girls were brought to the center. A dedicated space to conduct co-curricular activities within the campus was missing. Further, the dining facility was smaller, which meant that only a limited number of girls could be served meals, that too in a number of batches. The support from Infosys Foundation has helped the center overcome these specific challenges as well.
Effectiveness	• The project has had multi-faceted impact on the resident girls. The center has been able to prove itself effective in delivering service in line with its vision and mission.
	 Most of the girls agreed that their academic performance (85%, n=108) as well frequency of attending the school (90%, n=108) has improved post coming to the Shakthidhama center.
	• 107 respondents (n=108) agreed on participating in various co-curricular activities undertaken at the center such as activities pertaining to "Music and Dance", "Education activities", "Sports", "Drama and Theatre", and "Art and Craft". These activities have proved beneficial for these respondents by improving confidence, teamwork, academic performance, and enhancing a sense of creativity and self-expression.
	• Educational and Leadership programmes have also been beneficial with 96% and 71% of respondents (n=108) agreeing on participating in them respectively. The educational trips have helped the resident girls by providing opportunities for real world learning experience and also sparking interest in a few new areas of interest. The leadership programme has helped the girls in honing their leadership skills which they may better utilize in their future endeavors.
	• Close to 93% of the respondents (n=108) were in agreement that the center provided them with a safe and secure environment, which ultimately helped them in building a sense of safety while contributing to their peace of mind. This was especially essential because of the background that these girls belonged to, as indicated in the qualitative discussions.
	• Almost 65% of the respondents (n=108) have either been to or know of a similar facility other than Shakthidhama. However, overwhelming majority of them rate Shakthidhama better than that other facility on various aspects such as safety and security, hygiene, and quality of infrastructure. This is also evidenced in during the qualitative discussions with the resident girls.
	• The respondents (n=108) rated the multipurpose hall and the dining hall 4.81 and 4.86 respectively on a 5-point scale (with 1 being the lowest and 5 being the highest). This shows that the resident girls are satisfied with both these infrastructures.
	 On being asked on a scale of 1-5, how likely are they to recommend Shakthidhama to any other girl in need (1 being least likely and 5 being most likely), the respondents' average response was a high 4.86.





Parameter	Assessment from study
Convergence	 Shakthidhama center works towards eliminating the ill-effects emanating from the Devadasi system by providing the rescued girls a chance to get formal education and lead a dignified life. The support from Infosys Foundation in the form infrastructure created within the center complements these efforts. Further, the Government of Karnataka has already put in place schemes for the welfare and rehabilitation of the Devadasi women in Karnataka. Hence, these efforts from the center are convergent to the Government's already existing mechanisms catering to elimination of Devadasi system. The support provided from Infosys Foundation to the center also aligns with the vision of the Government to provide quality education to the girls, especially those coming from the disadvantaged strata of the society. In addition to this, no other partnership/ convergence was noted under the project.
Sustainability	 The project stakeholders, including the representatives from Shakthidhama, the resident girls, and the center manager agreed that the quality of infrastructure of the three facilities supported by Infosys Foundation is very good. The structure has long term durability and will be able to handle any future expansion in terms of intake of the girls.
	• Further, the facilities also contribute towards providing means of education for the resident girls, which would ultimately translate towards a sustainable career for these girls from deprived communities.
	• It was also noted that facilities built under this project are being maintained by the Shakthidhama Center. Team also observed that Shakthidhama administration is actively seeking funding support from other corporate partners, in equipping the library constructed by Infosys Foundation with the necessary infrastructure pertaining to a digital library. This would ensure that educational content is online for the girls' access over a long time .

10.6.Configured to the Infosys Limited's CSR policy and the UN SDGs

The project is aligned with Infosys Limited's CSR policy which includes education, women empowerment, community development as the key CSR focus areas for Infosys Limited. The project is also aligned with Sustainable Development Goals: **SDG 4 "Quality Education", SDG 5 "Gender Equality", and SDG 10 "Reduced Inequality".** SDG-4 aims to ensure inclusive and equitable quality education, whilst promoting lifelong learning opportunities for all. SDG-5 emphasises on eliminating discrimination, violence and harmful practices against women and children. SDG 10 looks at reducing inequalities in income as well as those based on age, sex, disability, race, ethnicity, origin, religion or economic or other status within a country.





10.7. Study Limitation

• Library building non-functional at the time of the assessment: As specified earlier, the library room constructed within the Infosys Foundation block was yet to be functional at the time of the survey due to the dependency of funding from other donors and the resident girls were using an earlier library (which was not part of the scope of the current project under assessment). Hence, this report does not cover the impact of the library.

10.8.Case Story

The following case story has been gathered in discussions with the Shakthidhama representative and the resident girls at the time of the team's visit:

Figure 129: Library Hall at Shakthidhama



Case story 1 : Chasing a dream

Sunitha (name changed) was rescued and brought to the Shakthidhama center from Belgavi district in North Karnataka. She belongs to the Devadasi family and was facing challenges around social and financial constraints to pursue her education back at Belgavi.

At Shakthidhama, after being brought to the center in 2018, she has felt empowered and has been able to complete her primary and senior secondary education through the support from the center. Further, she dreamt of becoming a lawyer and to pursue her dream, she has enroled into a law college in Mysore, where she is pursuing her degree in law. She also participates in various co-curricular activities carried out within the center premises, which helps in her overall development and has boosted her overall confidence.

She thanks the Shakthidhama center and the staff for their support throughout her journey. She says that she would also recommend Shakthidhama to any other girl in need as the center is unique in terms of the facilities and infrastructure it provides.





11. Project 8: RajyaMahila Okoota(RMO) & Grakoos



Over the years, Karnataka has made rapid strides towards progressive and inclusive development at national level, and it is among the lead states in India to incorporate human development perspectives in its programmes and policies. Despite these efforts, the state continues to face challenges pertaining to the regional, cultural and developmental imbalances. Districts in Karnataka have historically struggled with evil practices like **Devadasi system** and in order to root-out such practices, the **Government of Karnataka** passed a legislation **"The Karnataka Devadasis (Prohibition of Dedication) Act, 1982**⁷⁴. Besides, Government of Karnataka is also undertaking other schemes (such as Rehabilitation of Devadasi Program) for empowerment and rehabilitation of Devadasi women coupled with low literacy rate has warranted for increasing the coverage of education for children of Devadasi women and addressing the prevalent social issues such as child marriage, child labour and women's empowerment.

Telangana (bordering Karnataka on west) also face similar development challenges much like other parts of country. Though the Government of Telangana is undertaking various measures to mitigate these challenges, the state is still facing issues related to water scarcity and degrading of nature resources. Considering majority of the population in the state is mainly dependent on Agriculture & allied activities for livelihood, there exist the pressing requirement of supporting the small and marginal farmers and weavers in enhancing their income and reduce the poverty.⁷⁶

11.2.About the Project

Infosys Foundation has undertaken numerous CSR projects to support efforts in certain areas of women empowerment. One such project, supported by the Infosys foundation was the 'Rajya Mahila Okoota (RMO) and Grameena Koolikaarmikara Sanghatane (GRAKOOS)' under the implementing partner Khushi Trust to address social issues such as the Devadasi system and empower the women and children of the community in Raichur and Yadgir districts of Karnataka. Additionally, the project activities also aimed to support weavers and small farmers in Mahabubnagar district in Telangana.⁷⁷ A schematic representation of the project specifics is depicted below:



Figure 130: Schematic Representation of Project Specifics

This project aimed to uplift the socio-economic status of women and children in Raichur and Yadgir districts of Karnataka. It focused especially on devadasi women and children of devadasi women through regular awareness, training programmes and providing financial aid and scholarship programmes for education. In addition, the project also supported weavers and small or marginal farmers in Mahabubnagar district of Telangana. This project was a part of an established and long continued partnership between Khushi Trust and Infosys Foundation as the activities within this project were undertaken by the implementing

⁷⁴ Source: https://kmea.karnataka.gov.in/storage/pdf-files/Reports%20and%20other%20docs/Devadasi%20Eng.pdf

⁷⁵ Source: Ibid

⁷⁶Source:https://agri.telangana.gov.in/open_record_view.php?ID=959#:~:text=However%20main%20challenges%20faced%20by,agriculture%20production%2 0was%20not%20disrupted%2C&text=farmers%20still%20faced%20several%20challenges%20in%20accessing%20markets%20and%20procuring%20inputs.

⁷⁷ Source: MoU signed between Infosys Foundation and Khushi Trust



partner since 2009-1078. However, this study has been conducted to assess the impact created by following project activities during FY 2019-22 (project period):

Table 17: Activities of the Project (2018-2021)⁷⁹

Activities	Sub-activities	Target Audience	Project Reach
Awareness and Women's Rights	Awareness against Devadasi system, child marriages, child labor and the harmful effects of liquor	Devadasi, children and other community members	5,000 in Raichur district and approximately 200 in Yadgir district
	Work on issues of violence on women	Women	NA
	Supporting women cooperative banks ⁸⁰	Women	NA
Education Support	Education support to children for higher education	Class I to X students	150
	Scholarships to meritorious students from economically weaker children	Class XI and above students	750
	Ensure implementation of Right to Education (RTE) in government schools	Community institutions (Government schools and government authorities)	NA
Community Empowerment	Taluk-level trainings and monthly meetings	Women	NA
	Connecting families with entitlement ⁸¹	Community	NA
	Supporting weavers and small or marginal farmers in Mahabubnagar district	Farmers	Approximately 250

NA- not available/ applicable

11.3. About the Implementation Partner

Registered in FY 2009-10, Khushi Trust undertakes activities towards the upliftment of the community, in Raichur and Yadgir districts of Karnataka. The activities of Khushi Trust amalgamate social, and economic initiatives for the society. Khushi Trust implements these project activities through its associate organisations (RMO and GRAKOOS).82

⁷⁸ Project activities were being undertaken since 2001, however, at the time Khushi Trust was not a registered entity. The activities were undertaken by another entity who closed all operations in the region in 2009. ⁷⁹ Project information received from Khushi Trust

⁸⁰ All the activities mentioned in Table 1 have been supported by Infosys Foundation, however, activities 'Supporting women cooperative banks' and 'Connecting families with entitlement' were not supported by the Foundation under the specified project period. They have been mentioned in the project owing to their relevance to the other activities of the project.

⁸¹ Ibid

⁸² As per the discussions with Khushi Trust



This impact assessment study leveraged **an integrated and cohesive approach** to assess the social impact of Infosys Foundation's CSR project implemented by Khushi Trust. A **kick-off meeting was held with the Infosys Foundation** to understand the project activities at length, align on the study requirements and the support required from the Infosys Foundation for commencing the study. Following the meeting, PW received the following **project documents** from the Infosys Foundation and the Khushi Trust:

- Memorandum of Understanding (MoU) between Infosys Foundation and Khushi Trust
- Project report dated 17th June 2019 outlining the project progress (programmatic and financial)
- Data shared by Khushi Trust on the project reach and a description of project activities undertaken (through email)

The PW team then leveraged the received project documents for desk review to understand the project's progress for the assessment period. An **assessment framework** was then developed for the impact study following which the team identified the key stakeholders and a sample for data collection in consultation with Infosys Foundation. The PW team then leveraged the received project documents for **desk review** to understand the project's progress for the assessment period. Consequently, team **mapped stakeholders** for data collection for both quantitative and qualitative research methods.

In consultation with the Infosys Foundation, a **mixed methodology** (quantitative and qualitative research methodologies) was deployed to undertake the impact assessment study for this project. The quantitative study focused on generating insights and evidence related to the current and expected impact. The qualitative data was leveraged to translate observations, perspectives, and experiences into valuable understandings of the actual impact and further corroborate with key findings emerged from quantitative research methods like **Focus Group Discussions (FGDs) and In-depth Interviews (IDIs)** were also deployed.

The sampling plan was also finalized in line with the mapped stakeholders which comprised both quantitative and qualitative interactions. The total quantitative sample covered as a part of the impact study was **261**. While the split of the overall sample size was calculated leveraging **90% confidence interval and 5% margin of error**, it was further split across project activities proportionally.

Below **Table 2** provides **an overview of sampling plan** in line with the stakeholders mapped and project locations identified:

Table 18: Sample Plan for the Pr	roject
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Project Sub-activities	Quantitative Sample		Qualitative Sample	
	Sample covered	Stakeholders	Sample Covered	Stakeholders
Awareness against Devadasi system, child marriages, child labor, and harmful effects of liquor	221	Devadasi Women	4 FGDs	Devadasi Women
Work on issues of violence on women	-	-	6 IDIs	Women
Supporting women cooperative banks	-	-	2 FGDs	Women
Education support to children for higher education	7	Students	9 IDIs	Students
			3 FGDs	Parents



The sample coverage was also subject to the availability of the stakeholders and mobilization support from the implementing partner. Top four taluks with the highest reach of stakeholders were identified, and villages and locations for interactions were mapped accordingly. Raichur Taluk, Lingsugur Taluk, Sindhnur Taluk and Manvi Taluk were selected as the top four taluks for data collection.

Basis the information provided by the Khushi Trust team, the activity with weavers was not taken up in Mahabubnagar district. Further, the farmers (beneficiaries) were not available for interactions. As a result, the team was not able to gauge their perceptions towards the sub-activity 'Supporting weavers and small or marginal farmers" which accounted for only 7% of the project output and cost. Project activities carried out under Raichur district constituted 93% of the project output and cost. Hence, to understand the impact of the overall project activities, the team interacted with the respective project teams from Infosys Foundation (one IDI) and Khushi Trust (one IDI). Further, **40 qualitative sample involved interactions** with **~190 beneficiaries to understand the holistic perspective** of this project were conducted. The team also ensured the appropriate representation of four taluks i.e., Raichur, Lingsugur, Sindhnur, and Manvi during the quantitative and qualitative interactions. These locations were finalised in alignment with the implementing partner to ensure the availability and ease of mobility of stakeholders who were a part of the data collection process.

11.5.Analysis & Findings

11.5.1. Challenges before the Project

Basis discussions with the Khushi Trust, team noted that the following challenges before the project interventions:

- Lack of Awareness towards Women's Rights: Devadasi system continued to persist and instances of exploitation of women and girls, violence against women including domestic violence and sexual assault went underreported. These issues were exacerbated by a lack of awareness on avenues for seeking support and legal aid.
- Lack of Access to Education: Students hailing from marginalized backgrounds were prone to high dropout rates. They were compelled to leave school due to factors such as economic constraints, child marriage and child labor. Inadequate adherence to the Right to Education (RTE) Act led to various shortcomings in school facilities including dysfunctional toilets and undermining the learning environment.





• Community Empowerment: Community members were unaware of their entitlements and rights including access to government schemes and services.. The financial dependency on banking institutions was causing strain upon people's lives, particularly among women which hindered their ability to make informed decisions and manage household finances effectively. This marginalized them further within their communities.

11.5.2. Summary of the Impact Created

This section captures the key findings of the study in line with interactions carried out under below activities:

- a. Awareness programmes against devadasi system, child marriages, child labour, and harmful effects of liquor (n=221),
- b. Scholarships to meritorious students from economically weaker children (n=33), and
- c. Education support to children for higher education (n=7).

Below are the key findings:

A. Profile of the Respondents

Respondents were probed on the various parameters such as the age, gender, social category, economic profile, and the educational background of the families to understand their socio-economic background. From the survey findings, it was noted that:

- Majority of the respondents surveyed as a part of this project (93.9%) were female (n=261) owing to the awareness activity focusing on women. The male representation was from the pool of students who were supported through the education activities.
- 36.8% of the respondents were from the 30-40 years age category (n=261) as reflected in Figure 133.

Figure 131 : Gender Distribution of the Respondents (n=261)

Figure 132: Age-distribution of the Respondents (n=261)



• The average family size of the **respondents was four and 80.8% of the respondents** were the breadwinners of their family. In terms of occupation, **64.4%** of the respondents reported agriculture labour as their occupation and primary source of their income (n=261).

Figure 133: Occupation-wise Distribution of Respondents





Respondents were further probed to understand their awareness towards Infosys Foundation and its role in this project. **97.3%** of the respondents (n=261) **had heard about Infosys Foundation**. It was noted during the qualitative interactions, the Khushi Trust raised awareness of the support provided by Infosys Foundation whenever people enquired about their purpose of village visits. The reach of the RMO and GRAKOOS members on the ground was vast, resulting in more people being aware about Infosys and their work with Khushi Trust. Infosys Foundation was also a source of inspiration to most individuals such as students who indicated contributing to their social causes in future.

B. Activity-wise Findings from the Research

1. Awareness against Devadasi System, Child Marriages, Child Labour, and Harmful Effects of Liquor

It was noted that these awareness programmes were run by the **taluka committees of Khushi Trust** with the help of the Gram Panchayat committee wherein they leverage special occasions, festivals or monthly markets as platforms for showcasing '**nukkad nataks' or plays, dramas, put up posters and share pamphlets, songs, or processions** to spread the awareness. Further the monthly group meeting in the villages is utilised to raise awareness against the Devadasi system, child marriage, child labour and harmful effects of labour as focus areas during discussions. sBased on the findings, it was noted that:

• 79.2% (n=221) of the respondents shared the same view wherein they indicated that they had attended five or more awareness meetings and witnessed these campaigns. 9.5% (n=221) of the respondents had attended four meetings and witnessed these campaigns.

 5.0%
 6.3%
 9.5%

 2
 3
 4
 5 or more

Figure 134 : Number of Awareness Campaigns Attended (n=221)

 The campaigns promoted awareness against all four issues i.e., the Devadasi system, child marriage, child labour and alcohol abuse. Majority of the respondents (95.5%, n=221) opted Devadasi system as the theme of awareness campaign, followed by Child marriage (92.8%) and Child Labour (89.1%) as depicted in Figure 136. These responses are based on the perception and commitment of the respondents on multiple issues discussed during the awareness sessions.

Figure 135 : Topic of Awareness Campaigns (n=221)

Figure 136 : Medium of Awareness Campaigns (n=221)





• The medium of the **awareness campaigns was mostly the monthly group meetings (82.8%, n=221) in the village** where these issues were discussed as depicted in Figure 137. Pamphlets and plays or skits also had a significant share with 70.6% (n=221) and 59.7% (n=221) of respondents getting impacted from the same.



"Earlier, we didn't raise our voices against these issues, now whenever we get to know that if any parent is engaging in child marriage, we instantly gather and request the family to not proceed with the same. If the issue persists, then we call the authorities and make sure that it doesn't happen."

The respondents also mentioned that these **sessions have helped them understand these issues with** more clarity now and they take these concerns mores seriously now. As depicted in Figure 138 as 91.9% (n=221) of the respondents agreed that these campaigns have been very helpful in creating awareness and knowledge on the societal issues. Also, 90% (n=221) of the beneficiaries believed that these campaigns have guided them on what steps to take when a case of child labour/ child marriage/ substance abuse is evident to them.

The campaigns have also equipped the respondents with **informed decision-making capability** when witnessing **child marriage/ child labour cases** as 100% (n=221) of the respondents have agreed on the same. Additionally, 84.2% (n=221) of the beneficiaries believed that **these campaigns have helped in staying safe and creating a safe environment** for the community members.



Figure 137 : Impact Created by the Awareness Campaigns (n=221)

• The awareness campaigns also intended to empower women and make them community leaders of their areas and contribute to any change that they can bring by working on the issues mentioned above. The same can be seen from the data below as all the respondents i.e., 100% (n=221) believed that they are equipped better now to be a community leader. Also, 92.8% (n=221) of the respondents have supported their community members more than ten times at different instances such as child





marriage, child labour, etc., whereas 5% (n=221) have supported the community members occasionally (>3 times) post attending these campaigns.

When further enquired how have the respondents supported their community or village members 87.8% (n=221) of the respondents mentioned that they now collaborate with community members on combating these issues together. 76.5% (n=221) of the respondents mentioned that they help the community and village members by identifying issues related to child marriage/child labour/substance abuse to authorities. 47.5% (n=221) of the respondents contribute by spreading awareness related to these challenges and try to educate as many people as they can.

Figure 138: Behavioural Change in Community after Attending Awareness Campaigns (n=221)



Inreased collaboration among communityPromptly identifying and notifying issuesIncreased awareness among themembers on combatting social evilto authoritiescommunity

 Owing to these collective efforts, the respondents had shared that the issues like child marriage, child labour and devadasi system had dropped considerably than before. Although some respondents mentioned that the issue of liquor abuse is still prevalent in some areas due to illegal alcohol shops. The community is actively working upon this issue.

All of this was reaffirmed from the quantitative data gathered as the belief of respondent regarding improvement in these issues was very optimistic. All the respondents i.e., **100% (n=221) believed that the campaign has been successful in spreading awareness and has also contributed to the reduction of child labour, child marriage and devadasi system**. 99.1% (n=221) of the respondents believed that there is reduction in cases of alcohol abuse in the community.

Considering such positive outlook towards the initiative when the respondents were enquired if they will suggest other people to join in such campaigns all the respondents i.e., 100% (n=221) agreed that they will suggest the people to join. Further when enquired the reason for suggesting the same with majority of respondents i.e. 87.8% (n=221) believed that the campaign is easiest way to grab attention for creating awareness (Figure 140).



Figure 139: Reasons for Suggesting the Campaign to Others (n=221)

***Multiple choice question, total may not add up to 100%





- During discussions all the respondents had expressed satisfaction towards the awareness campaign and were appreciative of the efforts. But when enquired if the respondents had any feedback towards the awareness programmes, the respondent shared following:
 - Lack of time to attend these campaigns.
 - Inclusion of more relevant and new issues (such as unemployment among the marginalised youth)
- 2. Work on Issues of Violence on Women
- Multiple touchpoints: Under this activity, Khushi Trust provided moral guidance, physical and legal support to women in need. Most often they received cases of domestic violence, injustice through situations such as demand for dowry, pressure on the woman for a male child, extra marital affairs of husband and alcohol abuse etc. Often, Khushi Trust provided mediation support to families as a solution. In efforts of mediation, Khushi Trust has had several cases wherein they would have to demonstrate, produce marches, or make multiple visits/ communication efforts with both parties before arriving at a conclusion.

A lady stated how her husband and his family were unwilling of accepting her as his wife after they got married in secret. The family of the boy wanted to marry him to someone else, but it was only with the mediation support of the women on-ground team members of Khushi Trust that she could find her voice to fight with her in-laws so they would accept her marriage with their son. Khushi Trust not only helped her vent her emotions and find the correct course of action but also provided her with ample support to be able to fight for her justice.

- Increased trust and safety: Women reported that they preferred sharing their issues with Khushi Trust
 rather than with the police as a part of this project. This was because they wanted the matter to remain
 within their own home, or community and not reach to courts or legal authorities. Women also stated how
 they felt safer knowing there is somebody who they can approach in cases of crisis.
- Reduction of expenses: Another reason was the expenses associated with such help and the delays that came along with it. On an average, cases were closed within a span of three to four months of being reported to the team. Women also shared due to the interventions under this project, they would get instant support which was free of cost and any judgement. Women reported these cases not only for themselves but also on behalf of other women in the villages. There were multiple cases, wherein mothers, aunts or even grandmothers approached Khushi Trust for justice for their daughters, nieces, or granddaughters.

A woman reported how her daughter was supported by Khushi Trust end-to-end when she unfortunately underwent a traumatising experience of harassment from an unknown stranger. Not only did Khushi Trust agitate to pressurise police authorities to find the culprit but also helped the woman's daughter with medical and legal expenses. They also helped the family apply for government schemes and seek appropriate entitlement support.

3. Supporting Women Cooperative Banks

Women cooperative banks started getting established from **2009-10 with the support of Infosys Foundation** in Lingsugur taluk. Over time, the bank expanded its reach from Lingsugur taluk to four additional taluks of the Raichur district. In years of 2015-2019, women cooperative banks were also opened in Sindhnur, Manvi, and Raichur taluks. Each group has anywhere between 10-15 women members each contributing INR 100 per month (revised to INR 200 from 2023 onwards). Each group continues to be managed by a Khushi Trust member (Karyakarta) who handles money for the group. Today, these groups are monetarily self-sustained and have collectively over **18,000 members** across locations. During the discussions, it was noted that:

• Less interest rate with no collateral deposit: While this activity is mostly led with the initiative of women members themselves, they still have support from Khushi Trust for overall management. Women reported that they prefer taking loans from their women's cooperative bank considering that the interest rate is much higher with local lenders (2-3 times higher). Additionally, they also must keep collateral to take





loans with other banks/ other local money lenders. In the cooperative bank, the **interest rate is 18% and no collateral is required**. Other cooperative banks offer interest rates in the range of 20-30%, while local money lenders offer an interest rate of ~36%. Women also reported that the major difference is the reduction in principal amount as the loan is repaid which is not the case with banks.

- Flexible payment mechanism: Women also prefer the flexibility in repayment plans and other perks that they receive as a part of the cooperative bank. Late repayment is allowed but only in genuine cases and with the consent of all the other women in the group. In case of death in the family, the woman is also paid an amount of INR 15,000/-. Women are also provided with dividends at the end of the year, in the form of some utensil or item of daily use of the same amount.
- Increased acceptance and utilisation of the loan: This activity has roped in women in high numbers and has been the base for also spreading awareness among them on the different kind of support they can avail from Infosys Foundation and Khushi Trust. For example, women often made the payment of the education fee of their children through the loans they took from women cooperative banks. Children of group members were also provided with scholarships/ education support in primary school in most cases. Besides this, women shared that the loan amounts have been beneficial to them in building houses, conducting marriages, emergencies such as accidents, health issues or even in starting their own businesses.

A woman shared that with the help of a loan she was able to buy a roti-making machine, and today she has her own small-scale tiffin business.

Another woman shared that today, she has been able to buy cattle and has also sold the calves for INR 50,000 which she has safely deposited in the bank in a Fixed Deposit. She hopes to use it for her child's higher education one day.

A woman added that with her loan amount she bought a tailoring machine and was able to contribute into the deposit for her own house along with her husband. It was a matter of great pride and independence for her.

• When asked what they would like to improve or change, women shared that they would like to **add more members to a group if possible, and if possible, also like to learn livelihood skills.**

4. Scholarships to Meritorious Students from Economically Weaker Children

Scholarship support was provided to children from class XI and above (up to PhD level). This support was provided to meritorious students from economically weaker families on a yearly basis. Students for the scholarship were selected based on their academic performance of the previous year. The score requirement was lower for girls (50-60%) as against the boys (70-80%). However, relaxation in selection criteria was also given to children based on their financial conditions. Preference was given to children of devadasi women, orphans, children with single parents or children from families with extremely weak economic conditions, in most cases belonging to SC and OBC communities. Based on the interactions, it was noted that:

• 97% of the students surveyed were pursuing their education, while the remaining 3% were preparing for higher education (n=33). Of the students pursuing their education (n=32), 59.4% were pursuing undergraduate course, followed by 25% respondents reported pursuing post-graduate courses.





Figure 140: Status of Education of Respondents (n=32)



- **75.8% of the respondents were receiving support for more than one year but less than three years** while 15.2% of the children surveyed were receiving this support for one year (n=32).
- 100% students agreed that this initiative was beneficial to them (n=33). During interaction, they stated, that in addition to financial assistance they also get moral support and guidance for the future. This resulted in lowered dropouts and a continued interest in education. The probability of a potential drop-out was higher among girls than boys wherein parents would be more willing to support the education of their sons over daughters.
- 97% of the respondents, stated that the project delivered support helped them in continuing their education. 6.1% of the respondents stated that the support helped them in maintaining their interest in studies. 3% of the respondents felt that the support helped them seek suitable career options, find the correct study courses for themselves and provided them with an avenue to be changemakers in their community (n=33). 100% of the respondents stated that they motivate their friends/other students to also study further (n=33).
- As depicted in Figure 142, the scholarship also increased time for students to study due to reduced financial burden (57.58%), lowered the risk of drop-out for children (45.45%) and helped them secure the degree of their choice without any monetary fear (30.3%) (n=33).





• It was reported that the scholarship was provided to the child only after the beginning of the academic year making it the responsibility of the parents, guardian, or student to pay the fees at the time of the admission. This was because the process mandated to provide marksheet of the student from the previous year as a part of the selection criteria, which was not provided by their institutions in time. This often posed a challenge for the parents, wherein the mother took a loan from the women cooperative bank or loans from other family members or external sources at high rates of interest. The scholarship amount was then used to repay the loan or used for other purposes such as the exam fee (paid in the latter half of the academic year), hostel fee, or even stationary, books, bus pass, etc. 64% of the respondents leveraged their scholarship amount for reading materials and 45% of the respondents used it for stationary and uniform or shoes, each (n=33).

Figure 142: Multiple usages of Scholarship (n=33)







Figure 143: Use of Scholarship Amount (n=33)



Multiple choice question, total may not add up to 100%

Since this scholarship was fixed and only covered a part of the student fee in most cases, the respondents stated that they often applied for other government/ institutional scholarships available to them. 27.3% (n=33) of the children availing scholarships from Khushi Trust were also availing other scholarships. When asked how those scholarships are different from the one offered by Infosys Foundation, 77.8% of the respondents pointed that they are more adequate in terms of monetary support whereas the remaining 22.2% stated that the other scholarships had timely disbursement of the scholarship amount. (n=9).

The students stated that in case this support was not provided to them, it would have created a higher monetary burden on their parents. **69.7%** of the students agreed with the same (n=33) while **24.2% stated that they would have had to seek education loans** to complete their education in case this scholarship was unavailable. 6.1% quoted relying on other informal sources of money for supporting education (n=33).

As described in Figure 145, the reasons for students to take these scholarships was also due to challenging financial situations in households (73%) and that they did not want to avail any education loan or undertake lengthy documentation processes (24%) (n=33).



Figure 144: Reasons for Taking up Scholarship from Infosys Foundation (n=33)

5. Education Support to Children for Higher Education





It was noted during interactions that often parents of supported children, struggled with physical and/or mental health issues or substance dependencies. In certain cases, household conditions of the children were also such that the families required the child to engage into the livelihood activities. This activity provided support to meritorious students from **class I to X**, **belonging to economically weaker families**, in the form of counselling and monetary aid (as per the requirements). Preference was given to children of devadasi women, orphans, children with single parents or children belonging to families from poor economic background.

"Access to the hostel and school facilities provided under the project are letting her attend school, otherwise she would've dropped out long ago".

As narrated by a guardian of one of the respondents (whose mother has passed away at an early age and father is an alcoholic leaving no one to look after her)

In terms of the period of support, 42.8% (n=7) of the respondents have been receiving support for more than 5 years which also includes the period of assessment of this project whereas 28.6% (n=7) of the respondents have been receiving the support for more than 3 years. The respondents also shared during discussions that earlier they were totally dependent on their parents for purchasing notebooks, stationary, etc. for their schools. 100% (n=7) had agreed to this dependency.

When enquired how has the support helped the respondents, the analysis reflects that 85.7% (n=7) witnessed an increase in their interest in academics due to the program whereas 71.4% (n=7) of the respondents believed that there was increase in their interest towards co-curricular activities and better attendance in school.



Figure 145: Impact of Support (n=7)

- The increased interest in academics led to better performance in academics as well. 100% (n=7) of the respondents agreed that the support provided has helped them do better academically.
- Further 71.4% (n=7) of the beneficiaries felt that there is a reduction in expenditure on school related activities whereas 42.9% (n=7) of the respondents believed that there is an increase in focus on academics.
- The parents during the discussion shared that they've developed interest towards children's education.
 100% (n=7) of respondents reported that their parents' interest has increased in their studies post the program.
- Discussion with parents also revealed that children now get good quality uniforms, notebooks and stationery for their education in the school itself. The same could be reaffirmed as all (100%) (n=7) the respondent believed that now they get sufficient items compared to the earlier situation whereas 85.7% (n=7) of the respondents believe that the quality of the items they receive is better than the items which they used earlier.





- During the discussions, both parents and the students expressed satisfaction towards the support which they were receiving. 100% (n=7) respondents agreed that they feel that the support is fulfilling and adequate.
- 6. Ensure Implementation of Right to Education (RTE) in Government Schools

Under this initiative, efforts were undertaken to ensure that RTE Act⁸³ was followed by the schools, children were being made aware of RTE and parents were sensitised to send their child to school. For this purpose, major pain points within schools were identified and were reported to the concerned authorities to solve them. Common challenges included student dropout due to family conditions, shortage of quality teaching staff, and infrastructural problems in schools such as lack of water supply and drinking water or toilets. To understand the impact created by this project activity, team carried out the qualitative interactions with Khushi Trust and local community members. During the interactions, it was noted that:

- To bring about behavioural change among communities, the Khushi Trust **provided families with knowledge on their rights, such as Right to Life, Right to Education and created awareness** among them on what should they demand from their Panchayat and local representatives. These interventions led to the behavioural changes among the community members.
- Often, Khushi Trust encouraged two or more children to speak about their problems whether in the village or at school in the Gram Sabha meetings in front of the Panchayat. Khushi Trust in the past had also raised school related problems to concerned authorities. Another aspect was sensitising parents to send their children to school to continue the education, take interest in their academic results and demand quality education. Students and teachers shared that the team personally visited students from the school who were on continued leave and ensured that they returned to school.

"I did not want to continue my education after I got my periods in class VII. There was no toilet in the school, and since the school is not close to my house coming home to use the toilet was not an option. It became too overwhelming for me to attend school during my periods and as a result my education started to lag. After the efforts of Khushi Trust, toilets were constructed in the school and my confidence to attend classes was restored".

-As narrated by a girl student during interactions

- It was further noted that the Panchayat listened on various issues such as water shortages, provision of sports equipment, etc. However, certain issues such as the presence of a liquor shop close to the school vicinity, were yet to be resolved. One of the major challenges reported was the time it took for action to be taken by authorities on problems causing long delays and loss of trust among the community.
- 7. Taluk-level Training and Monthly Meetings



⁸³ Right of Children to Free and Compulsory Education (RTE) Act, 2009



Khushi Trust through its partner organisation RMO, works on **building community connect on social topics relevant to the people** and thus over the years has a **strong connect with the marginalised families of the district**. To capacitate the field level teams, regular meetings called Taluk Level Trainings and Meetings are conducted. Every taluk has a coordinator who is responsible for the taluk committee which consists of committee members representing different Gram Panchayat committee under the taluk. The Gram Panchayat committee is made up of group leaders from the different groups in the village. Following are the key findings emerged from qualitative discussions with community members:

- Increased awareness among the community members: These activities aimed at spreading awareness on prevailing issues in villages and equip the teams working directly with communities with necessary updates and information on new learnings, laws, and effective problem-solving methods. Project activities such as awareness campaign for women, supporting women cooperative banks and the work on violence against women all are anchored and supported by taluk level meeting and training sessions.
- Easy to understand and relevant topics: The monthly meeting involved discussions on current issues in the village and the allocation of responsibilities. During the discussion with the taluk trainer, they shared that the usual agenda of the meeting revolved around a terminology

Figure 17: Easy to Understand Poster Used for Trainings



namely 'Bas Bus' where 'Ba' resembled 'Bal' which is strength, 'S' stood for 'Sangathan' which is organisation, 'Bu' resembled 'Buddhi' which is intelligence and 'S' resembled 'Samasya' which means issue in the Hindi language. The meetings revolved around discussions regarding problems, on need basis. The issues requiring more attention from community's perspective were given a preference.

These meetings were also a healthy space for learning for these organisation's members. During the meeting charts, plays, nataks, cinema, etc., were used to make learning easier and smoother for the committee members. The members shared that these meetings had been exceptional in teaching them about their rights, different government schemes further resulting in increasing their confidence. They mentioned how they were hesitant earlier and now would rightfully resist if any of their rights are violated.

The interaction with taluk trainers mentioned that the responsible taluk level trainers/coordinators also get trained and learn about new laws, schemes, from different team members keeping the learning cycle. There were trimonthly and half yearly sessions organised for these coordinators with lawyers, doctors, etc., to keep them updated with current schemes, laws, issues so that they could further pass them on during meetings and knowledge transfers could keep happening.

• Increased satisfaction among community members: Throughout the discussion the respondents expressed satisfaction on the working and existence of their committee. According to the respondents the most satisfying part about these sessions is knowledge transfer amongst the peers, spreading awareness and aiding those in need. The meetings also took care of the working efficiency of the organisational members (Karyakartas) on the field belonging to various groups and the irregular performance of any karyakarta to the committee, after careful discussion action was taken in the form of caution alert to the karyakarta.

8. Connecting Families with Entitlement

For community empowerment and development, the focus was on connecting **needy households with suitable entitlement and welfare schemes.** For the ease of people and ensuring better efficiency, door to door visits were made in all the villages asking on the status of benefits being availed and spreading awareness on the issue. During discussion with the respondents, following findings were emerged:

• Increased access to entitlements: The respondents mentioned that the initiative has linked people with the benefits of 'The Mahatma Gandhi National Rural Employment Guarantee Act 2005





(MGNREGA)'. Some of the people have got their labour card made which connects them to various state government schemes based on their labour profile. Some of the beneficiaries got ration cards made through this initiative.

They also shared one incident of Kallur village in 2018 wherein 350 villagers didn't have their papers for their land for which the members of Khushi Trust mobilised them and connected them to the district collector office where the issues faced by them were conveyed. After waiting for six months when the issue did not get resolved, the people under the guidance of Khushi Trust further took this up to Suvarna Vidhana Soudha (Legislature building of the Karnataka government) in Belagavi where they raised their issue, which was acknowledged and resolved with people receiving their papers for their land.

• Increased awareness among the community members: The initiative has also aided in people rightfully claiming their entitlements at the Gram panchayat level leaving no space for malpractices. One of the respondents shared that the people have rightfully started to claim their benefits due to the consistent awareness initiatives.

The same impact was also observed in Mamdapur village where 15 women received gas cylinders under Ujjwala scheme of central government. Some of the respondents also received the SC/ST scholarship for their children with the help of the support from the ground workers of Khushi Trust and its partners. One of the respondents during discussion shared that she received the benefits of housing scheme Dr B. R Ambedkar Niwas Yojana of Karnataka state government with the help of the awareness created by the ground members. The discussion also brought up the change in the migration scenario as earlier people were migrating to Bangalore in search of employment opportunities but now, they have been availing the benefits of MGNREGA in their village itself which they were unaware of earlier.

• Overall satisfaction among respondents: When enquired about any feedbacks, the respondents shared that they are completely satisfied with the support and have no suggestions for improvement as such for this initiative. They shared that owing to the initiative the awareness related to government schemes and entitlements has increased many folds and now the people are very courageous and curious to claim the social security benefits provided by the state for the masses.

11.5.3. IRECS Analysis

Based on interactions with key stakeholders and desk review of the project report, **impact of the project has** also been assessed on the IRECS (Inclusiveness, Relevance, Effectiveness, Convergence, Sustainability) framework parameters. The IRECS analysis summary has been presented in below table:

Table 19: IRECS Analysis

Parameter	Assessment from Study
Inclusiveness	 Majority of the beneficiaries covered as part of the project activities belong to socially vulnerable groups in the concerned region.
	 The interventions have been women centric in nature with overwhelming majority of the respondents being women (93.9%) across age groups.
	 Additionally, the project specifically focused on one of the most marginalized sections of society, the devadasis and worked towards eliminating the practice through awareness and other activities.
Relevance	• The project focuses on creating awareness against the evil practices such as Devadasi women in Raichur district. Project focuses on addressing relevant social issues of the local community, for example, child marriage, child labor and the harmful effects of liquor. The project focuses on bringing the desired behavioral change through regular communication and motivation. The project further focused on the promotion of Education through necessary education support and scholarships which happens to be one of the relevant issues in the district.

Parameter	Assessment from Study		
Effectiveness	Awareness and Women's Rights		
	• 87.8% (n=221) of the respondents mentioned that they now collaborate with community members on combating these issues together. 76.5% (n=271) of the respondents mentioned that they help the community and village members by identifying issues related to child marriage/child labor/substance abuse to authorities.		
	 All the respondents i.e., 100% (n=221) have a positive belief that the awareness campaigns have been successful and have contributed to the reduction of child labor, child marriage and the Devadasi System. 99.1% (n=221) of the respondents believe that there is reduction in cases of alcohol abuse in the community. 		
	 The impact is evident in the swift closure of cases, provision of end-to-end support for victims and the empowerment of women to pursue livelihood opportunities for financial independence. 		
	Education Support:		
	• 100% students availing scholarship support for class XI and above agreed that this initiative was beneficial to them (n=33). For 97% of the respondents, support from the scholarship helped them in continuing their education. The scholarship also resulted in increased time availability for studies due to reduced financial burden (57.58%), lowered the risk of drop-out among children (45.45%), and helped them pursue education of their choice without any monetary implications (30.3%) (n=33).		
	 Under the education support activity from class, I to X, 85.7% (n=7) expressed increased academic interest because of the interventions. 100% (n=7) of the respondents agreed that the support provided had helped them perform better academically. Increased interest toward co-curricular activities, better attendance in school and the reduction in expenditure towards school related activities was experienced by 71.4% (n=7) of the respondents. 		
	• Diligent oversight of the project has ensured compliance with the RTE Act in local schools by identifying cases of non-compliance and promptly reporting them to authorities, facilitating necessary improvements like the installation of toilets in schools boosting attendance especially among female students.		
	Community Empowerment:		
	• Taluk level meetings provided a platform to effectively disseminate updates on village issues and provide community teams with problem-solving methods. This fostered a proactive engagement and informed decision- making in activities of awareness campaigns for women, supporting women cooperative banks and the work on violence against women.		
	 Structured agendas and meetings ensured discussions prioritizing prevalent community concerns and allocation of responsibilities promoting accountability and focused action on addressing key challenges. 		
Convergence	 Convergence with government schemes and entitlements is within the fabric of this project. For example, RTE, connecting socially vulnerable and marginalized groups with various government schemes. 		
	• Under community development, the Labor Department and Food Civil Supplies and Consumers Affairs Department of the state government are engaged for getting labor cards and ration cards for the people.		

Parameter	Assessment from Study
	 Khushi Trust also works in closely with the government authorities and utilizes schemes of Government of Karnataka for women in distress especially in cases of violence against women or children and reports cases as required.
Sustainability	 The focus on providing access to quality education for younger generation reflects in the direction towards bringing a generational change in attitude, behavior and thought process ensuring a sustainable change in the society.
	• The taluk level training and monthly meetings serve as a sustainable platform for ongoing awareness, learning and problem solving ensuring the longevity of the program's positive effect. This is evident from the fact that 100% (n=221) of the respondents believe that they are equipped better to be a community leader.
	• The support mechanisms established for raising awareness around rights and entitlements, legal aid to women facing violence has ensured a sustainable approach wherein people have become aware and are raising related concerns and issues at appropriate levels. The overall focus on communication, trainings, awareness creation around the prevailing social issues reflect the intent to create a long-term sustainable change in the society which is able to thrive even after the project intervention is over.

11.6. Alignment to the Infosys Limited's CSR policy and the UN SDGs

The project is aligned with Infosys Limited's CSR policy which includes education, women empowerment, community development as the key CSR focus areas for Infosys Limited. The project is also aligned with Sustainable Development Goals⁸⁴: SDG 4 'Quality Education', SDG 5 'Gender Equality', and SDG 10 'Reduced Inequalities'. SDG-4 aims to ensure inclusive and equitable quality education whilst promoting lifelong learning opportunities for all. SDG-5 emphasises on eliminating discrimination, violence and harmful practices against women and children. SDG 10 looks at reducing inequalities in income as well as those based on age, sex, disability, race, ethnicity, origin, religion or economic or other status within a country.



11.7.Study Limitation

Lack of Project Documents and Stakeholders: There was only limited data available with Khushi Trust to map the stakeholder sample for quantitative data collection. The data on activity outreach across project locations was available only either in approximation or was completely unrecorded creating a challenge to undertake quantitative data collection for all the activities. As a result, data collection for certain activities was only undertaken qualitatively based on approximate outreach of the activity. Further, small, and marginal farmers were not available to understand the impact created by the project activity 'Supporting weavers and small or marginal farmers in Mahabubnagar district' as indicated by Khushi Trust. Hence, same was not covered during this study.

11.8.Case Story

Change Story: – Nurturing Aspirations, Transforming Lives

In the heartland of educational empowerment, the story of Kemappa (name changed), a resilient 19-yearold pursuing a Bachelor of Arts in History and Political Science unfolds as a testament to the profound impact of the initiative undertaken by Khushi Trust.

Born into the complexities of a marginalised background, Kemappa's journey is a tapestry woven with the threads of resilience and unwavering determination. Hailing from a family where his mother, once a



⁸⁴ Source: https://sdgs.un.org/goals



devadasi, now dedicates her time to caring for her elderly mother and his elder brother, a diligent daily laborer shoulders the responsibility of supporting the family.

The intervention of Khushi Trust commenced in Kemappa's life during his 2nd standard has continued to illuminate his educational path ever since. Despite facing financial constraints, Kemappa excelled academically securing an impressive 84% in SSLC and 64% in 12th grade. His aspirations, fueled by the support he received extend beyond academic milestones. He harbors a fervent ambition to become an IAS officer envisioning a future shaped by his pursuit of knowledge.

Kemappa's educational journey further unfolded in private schools, a dream realised post his 10th standard. A significant portion of the fees for 11th, 12th, and his ongoing Bachelor's degree ranging from 40% to 50% was funded during the project duration. The support extended beyond financial aid encompassing the identification of reputable schools and hostels along with crucial travel support provided twice or thrice a year.

Kemappa expresses deep gratitude acknowledging that uncertainty loomed over his education without their support. He emphasizes the indispensable nature of this assistance citing it as the beacon that guided him through the labyrinth of academic challenges. As a visionary suggestion, Kemappa advocates for job support to be extended to graduates from his community underscoring the holistic impact such interventions can have on marginalised individuals striving to break the challenge of limited opportunities.





12. Project 9: Kai Hididu Nadesennanu

12.1.Background

The education sector was among the numerous sectors that faced unprecedented challenges due to onset of COVID-19 disease. India, like all other countries had to close educational institutes and quickly adapt to online classes and digital learning methods. According to United Nations Children's Fund (UNICEF), schools across India were closed in mid-March impacting approximately 286 million students (48% girls) from pre-primary to upper secondary education. This is in addition to the more than 6 million children (48% girls) who were already out of school prior to the COVID-19 crisis⁸⁵.

After the pandemic, the Indian education sector saw a surge in the development of solutions to support the digital learning of students. While the central government pushed various programs to promote digital learning, the civil society organisations (CSO), corporates, Public Sector Undertakings (PSUs) and private edtech players also adopted digital learning as the way forward.

12.2.About the Project

The Infosys Foundation has undertaken numerous programs to promote efforts and positive outcomes in the field of education. During Covid-19 pandemic, the Foundation supported projects to alleviate impact of the pandemic and the resultant school closures. One such project is 'Kai Hididu Nadesennanu', a digital education program implemented by Yuva Brigade (implementing partner). This program aims to reach out to Kannada-medium government schools across the state of Karnataka and ensure improved learning outcomes of students through the means of digital education.

The project entailed **distribution of 1,500 digital tablets in 52 government schools** spread across 23 districts of Karnataka benefitting more than **10,000 students** with following objectives:

- I. Ensure zero dropouts,
- II. Improve student learning through digital education, and
- III. Develop and improve interest in Mathematics and Science subjects among students in classes 8-10⁸⁶.

The project also aims to complement some of the existing government initiatives on capacity building of the teachers and introducing digital skills to augment traditional teaching-learning methods for improved learning outcomes.

A schematic representation of project specifics is depicted as follows⁸⁷:

Figure 146: Schematic Representation of Project Specifics



⁸⁵ Source: <u>https://www.unicef.org/india/media/6121/file/Report</u>



⁸⁶ Source: Project report shared by Yuva Brigade

⁸⁷ Source: Information shared by Yuva Brigade and Infosys Foundation



The distribution of the 52 government schools spread across 23 districts of Karnataka is shown in the figure⁸⁸ below with the districts covered shaded in colour based on the number of schools within each district selected for the project intervention.

Figure 147: Districts Selected for Project Intervention Basis the Number of Schools⁸⁹



This project catered to students from classes 8-10th to provide access to digital learning in the important subjects such as Mathematics and English. Further, Cadcon (an online education platform) was onboarded by implementing partner as an academic partner for this project⁹⁰ who played important role in developing the digital content for the project.

As reflected in Figure 149, this project followed a robust implementation process⁹¹ wherein schools were selected by the implementing partner and data on the students was collected. After the collection of student data from schools, access to the learning app was enabled for each student within the selected schools before the distribution of tablets. Post the distribution of the tablets, orientation was organised for teachers on tablet usage and program implementation. This was followed by student onboarding wherein the students were oriented on the usage of tablets and regular classes were started to ultilise tablets. Finally, regular follow-ups, student assessment and analysis were undertaken for smooth implementation of the project. The multiple steps of the implementation process are depicted in Figure 149:



⁸⁸ Source: Information shared by Yuva Brigade

⁸⁹ Source: State map – Online Thematic Mapping, NIC, Ministry of Communication & Information Technology, Government of India

⁹⁰ Source: Project report shared by Yuva Brigade

⁹¹ Source: Project report shared by Yuva Brigade





12.3. Method of Impact Assessment

The impact assessment study used an **integrated and cohesive approach** to assess the social impact of the project. The engagement was initiated with a kick-off meeting with the Infosys Foundation team to discuss the overall scope of work and align on the expectations. Team also carried out project kick off meeting with Yuva Brigade team to gain a detailed understanding of the project.

Following the introductory meeting, PW received the following project documents:

- Project report outlining the overview of activities, objectives, progress and achievements of the project.
- Project completion certificate
- · List of schools and student beneficiaries
- Criteria for school selection

Desk review of the documents was conducted and mapping of key stakeholders on the project was completed. The project was evaluated based on a mixed methodology to cover quantitative as well as qualitative aspects of the project.

The quantitative methodology aimed to generate data-based insights about the impact of the project. The qualitative methodology was employed to translate the views, perspectives, and experiences of different stakeholders into useful insights about the impact of the project. In addition to quantitative research techniques like surveys, qualitative research methods such as focus group discussions (FGDs) and in-depth interviews (IDIs) were also selected to be utilized.

Key stakeholders were identified and tailored research tools were prepared for each stakeholder to guide the interactions with them. As per the information received from implementing partner, over 10,000 beneficiaries were covered under the project spread across 52 government schools in 23 districts in the state of Karnataka.

A statistically significant sample was taken into consideration in consultation with the Infosys Foundation from the above universe (population) using a **confidence level of 90% and a confidence interval of 5%.** Basis this, the total **sample size for the impact assessment was 264**. To proportionately distribute the sample, one **district each with highest number of students was selected from** the **four administrative divisions of Karnataka**. Further, within each selected district, the **sample was proportionately divided into the talukas and schools in the talukas within the districts to arrive at the school level samples.**

Final School-wise distribution of sample size can be reflected in the following table:
Table 20: School-wise Distribution of Sample Size

District	Taluk	Village	School Name	Sample Size
Belagavi	Athani	Satti	Government Highschool, Satti	28
Belagavi	Athani	Ingalagaon	Karnataka Public School, Nadi Ingalgoan	28
Belagavi	Athani	Hadaginala	Government Highschool, Hadaginala	13
Belagavi	Athani	Sapthasagara	Government Highschool, Sapthasagara	9
Belagavi	Gokak	Udagatti	Government Highschool, Udagatti	18
Belagavi	Gokak	Talakatanala	Government Highschool, Talakatanala	14
Belagavi	Mudalagi	Thigadi	Government Highschool, Thigadi	13
Bengaluru Rural	Hosakote	Nandagudi	Government Highschool, Nandagudi	18
Bengaluru Rural	Hosakote	Tavarekere	Government Highschool, Tavarekere	19
Bengaluru Rural	Hosakote	Hosakote	Swami Vivekananda Highschool, Hosakote	13
Bengaluru Rural	Hosakote	Hasigala	Government Highschool, Hasigala	13
Yadagiri	Gurumatakal	Baddepalli	Government Highschool, Baddepalli	14
Yadagiri	Shahapur	Lingeri station	Government Highschool, Lingeri station	44
Mysuru	Nanjanagud	Horalavadi	Government Highschool, Horalavadi	20
Total				264

Additionally, qualitative evaluation framework included the following interactions with various project stakeholders:

Figure 149: Qualitative Research Design for the Study





In line with the stakeholders mapping, quantitative survey for the selected sample with students (in Table 1) was initiated. Simultaneously, an **on-site visit to the project location** was conducted to administer qualitative interactions with the respective stakeholders (Figure 150). A **total 11 interactions** were completed, of which **seven interactions** were conducted in-person and **four interactions** were concluded virtually.

The data collected through the quantitative survey and the responses from the qualitative interactions were then analysed along with the secondary / desk research findings to arrive at detailed findings as depicted in the next section on <u>'Analysis & Findings'.</u>

12.4. Analysis & Findings

Based on the interactions with the stakeholders and a desk review of project documents received from the Infosys Foundation, the research team has summarised the findings of the study as below:

12.4.1. Profile of the Students

- As per the then Block Education Officer (Hoskote Block), the schools selected were geographically distributed among different talukas with students from disadvantaged economic background with poor learning levels. Students from class 8th-10th were selected as targets as they had more syllabus which was to be made easy for the students to understand and the technology would not be useful for the students of lower classes. An additional reason to target the class 8th-10th students was that marks obtained in the 10th were critical milestones in the education of students and more important than lower classes. The decision to target the students from class 8th-10th was reaffirmed by the headmasters of the schools.
- As depicted in the Figure 151 and Figure 152, out of the 264 students interviewed, 46.2% were class 8th students, 42.4% were class 9th students and 11.4% were class 10th students with 47.7% of the students being male and 52.3% of the students being female.
- From the discussions with implementing partner representative, it was emerged that this project has
 followed structured criteria to identify the schools. Previous school performance (results) and student
 engagements are among the major criteria being followed to select the schools.

Figure 150: Distribution of students according to Figure 151: Gender of the students (n=264) class (n=264)







12.4.2. Challenges Before the Project

Prior to this project, traditional methods of imparting education were prevailing in the selected government schools of the state of Karnataka. These came with their own set of limitations around:

- I. Conceptual understanding on the subjects,
- II. Limited exposure to digital education tools and techniques,
- III. Absence of necessary digital infrastructure like uninterrupted internet connectivity,
- IV. Shortage of technically skilled personnel support and
- V. Resistance from existing staff on adapting to modern teaching-learning methods.92

As informed by the then Block Education officer (Hoskote Block), the government of Karnataka had set up computer labs in government schools but after their installation, they had lots of issues. The computers provided in schools were not accessible during the period of Covid-19 pandemic. They were neither portable nor functional. This was coupled by a specific need for the students of class 10th who were scheduled to take the state board examinations for the year but due to restrictions caused by Covid-19 pandemic, the schools were unable to conduct any classes for them. It was further noted that Cadcon was directly working with some of the state government schools in Karnataka before the project and was able to identify this need for the intervention with Yuva Brigade team. Hence, this project was conceptualised to bridge such gaps and provide necessary support to help the students to get their studies back on the track.

Further, prior to this project, if the students didn't understand the topic in the class, they were hesitant to ask queries to their teachers and there was no mechanism to attend a session again or re-visit the key points multiple times other than manual records maintained by each student individually. The intervention focused to create a platform wherein students can revisit the learning content multiple times as and when required.

12.4.3. Summary of the Impact Created

1. Access to Education through the Digital Medium:

Tablet distribution was conducted in selected government schools under the ownership and responsibility of the **school headmaster**, or a teacher appointed in-charge for the same. One tablet was shared among two students during each session in the afternoon after the regular classes. **Majority (61%) of the students had** access to the tablets and the digital learning content and they were able to utilise the same (Figure 153). However, from the result of the survey (Figure 154), it was also analysed that 76% of students (i.e., 200) did face challenges while accessing the digital learning content through tablets. On probing further, it was noted that students did not know how to access the content on the tablet. Besides, poor internet connectivity and adaptability to digital content (due to traditional chalk/board method) were other challenges to access the digital content.



Figure 152: Utilisation of the Tablets by Students

Everyone could utilise the tablet

(n=264)

Figure 153: Challenges faced in Accessing the Tablet or the Digital Learning Content on the Tablets (n=264)





Only some students could utilise the tablet

⁹² Source: Project report shared by Yuva Brigade



Team probed with various project stakeholders (such as implementing partner, Taluka level volunteers, Block Education Officer, and Cadcon) to understand the steps undertaken to mitigate these challenges. It was noted that:

- i. A team of volunteers from implementing partner regularly visited the schools to attend to some of the challenges around acceptance of modern techniques of teaching and learning. Orientation sessions were organised by the Yuva Brigade volunteers after the distribution of the tablets to orient the teachers and students on the usage of the tablets and imbibing them as part of their regular classroom sessions. In addition to the physical orientation sessions by these volunteers, the Cadcon team also arranged for online sessions for students and teachers on a regular basis and attend to any specific feedbacks suggested.
- ii. Challenges around uninterrupted internet connectivity were addressed by collaborating with gram panchayats to get the internet services to the schools. As an example, in Hasigala Government School, Zila Panchayat members were involved and requested to extend the internet service to the school for better streaming of the content and the Gram Panchayat paid the internet bill with contributions of some people from the village.
- iii. Before the implementation of the project, a pilot was rolled out to understand the strength of the content and to receive feedback. As per the Cadcon representative, the pilot received a positive response from the stakeholders including the mentors from educational background.
 - 2. Hand-holding Support and Feedback Mechanism to ensure Effective Implementation

During the survey with the students (n=264), it was revealed that feedback sessions were organised in the schools with 66% students (i.e., 174 students) stating that they participated in feedback sessions or surveys during the project. As per the implementing partner representative, the feedback received from the teachers and the students were the major source of measuring effectiveness of the project. Feedback sessions were conducted at various stages of the program which paved the way for seamless implementation and effectiveness of the project.



Further, 93% of the students (n=174) mentioning that there were changes or improvements made based on the feedback provided by them as reflected in Figure 156. As informed by the implementing partner representative, the taluka level volunteers remained in constant touch with the teachers, the students and their parents for feedback on the implementation to understand if the program is able to augment traditional methods of teaching. In addition to that, the Founder of the Yuva Brigade visited the schools and inspected the issues arising through discussions with the stakeholders. The parents confirmed the same and stated that they were able to communicate the feedback to the teachers or the implementing partner team when needed. As informed by the teachers, they were encouraged to provide regular feedback on the implementation process of digital learning initiative. They were included during development of the content and before dissemination of the project. Yuva Brigade and Cadcon team supported teachers in each step of implementation process and resolved their challenges. There was also a feedback page on the learning app which was being utilised for submitting feedback.





Efforts were made to keep the **parents of the students aware about the project implementation.** Results from the responses received from the **students (82% i.e., 217 students) confirm that majority of parents knew about the project and thereby they were also aware of the introduction of tablets and digital learning content** in the school. As reflected in Figure 158, 98% of the students (n=217) mentioned that their parents had a positive response on the introduction of tablets and digital learning content. The same was also corroborated during the interaction with parents.

Figure 156: Parents' Awareness about the Introduction of Tablets and Digital Learning Content in the School (n=264)



Figure 157: Parents' Response on the Introduction of Tablets and Digital Learning Content (n=217)



In addition, the taluka level **volunteers also organised the meetings with Student Management Committee (SMC)** in the selected schools to apprise them about the implementation of the project. The headmasters and the teachers were onboarded **in consultation with the Block Education Officer** for implementation of the project. Subsequently, the parents were apprised about the project with the support of the school administration.

3. Relevant, Interactive and Easy-to-Understand Digital Learning Content:

The digital learning content provided through the tablets was developed in alignment with the state board curriculum for the class 8th to 10th in mathematics and science subjects. Cadcon had a dedicated team for developing the said content which comprised of experienced teachers based on their academic background from across the state. The focus was to develop interactive and easy-to-understand content and explain complex concepts in simplified and engaging 3D animated videos. The Block Education Officer (Hoskote Block) confirmed that a committee was formed consisting of local block level experts from schools recruited to meticulously review the content based in its relevance and difficulty levels. The content was provided in the regional language (Kannada) to ensure smooth transition of students from traditional learning to digital learning.

Almost all the students (99%) in the survey (n=264) responded that they found the 3D animated videos helpful in understanding complex concepts. Similarly, majority students (97%) found the 3D animated videos more effective than chalk and board method of teaching. Students could better understand the diagrams in science through the digital content on the tablet as compared to the books. For example, during the qualitative discussion with the students, a student said that a chapter of mathematics got easier for him to understand due to the digital learning content.





Figure 158: Relevance of the 3D Animated Classes in Helping to Understand Difficult Concepts felt by Students (n=264)



Figure 159: 3D Animated Classes more Effective than Chalk and Board Method of Teaching (n=264)



4. Increased Enthusiasm among the Students:

Students were excited about the afternoon sessions where they could use the tablets as they felt the classes with digital learning through the tablets were more interesting than the regular classes. Social media platforms were used to create group chats which helped the students to know about the timetable for these digital sessions. Most of the times these sessions were conducted after regular classes in the afternoon every day.

When probed about the inclusion and utilisation of the digital content on the tablet by the teachers in their regular classroom study, almost all the students (99%) affirmed on teachers utilising the tablets and digital learning content in addition to their regular teaching methods to help the students understand the concepts better. During the discussion with teachers, it was highlighted that the students were very keen to study using the tablets. The students were very keen and enthusiastic that they used to watch the content on the tablets even before the teachers started teaching those topics in the class. This eased the teachers' efforts in making the students understand a few concepts.

Figure 160: Utilisation of the Tablets and Digital Learning Content by Teachers into Regular Teaching Methods to Help Students Better Understand the Concepts (n=264)



5. Improved Learning Outcomes and Academic Performance of the Students

The project resulted in **98% of the students (n=264) developing an interest and aptitude for Mathematics and Science.** This contributed to **improving the coverage of the curriculum** and include topics to be covered at-length that might not have been covered in the absence of the project.

Students felt that the **tablet and digital learning content improved their understanding of both the subjects, i.e., Mathematics and Science.** There were **42.4% of students** who reported that they **improved significantly in understanding the subjects, 57.2%** who said it **improved**, and one student (0.4%) who did not experience any change.

As informed by the teachers, this was due to the **content on the tablet being in a regional language with simplified explanations** which contributed to the **improved understanding** in the students and an **increase in their overall performance** in the assessments.



Figure 161: Introduction to New Areas of Interest in Mathematics and Science that Students were not Aware of Before (n=264)



Figure 162: Improvement felt by Students in their Understanding of Subjects like Mathematics and Science due to the Tablet and Digital Learning Content (n=264)



Significantly Improved - Improved - No Change

Furthermore, in the **absence of Science and Mathematics teacher(s)** in the school, the digital education program through the **tablets assisted the students in learning** and understanding the topics without any issues, which resulted in the students praising the program. It was also reported that **the scores of the students increased comparatively after the introduction of the digital learning program** as the students grasped more while learning through the tablets than in regular classes.

98% of the students (n=264) noted a positive change in their academic performance using the tablet and the digital learning content. Students felt that digital learning program is helpful for the preparation of examinations especially for the class 10th. For example, one student mentioned that they witnessed an increase in their marks from 60 to 74 and another from 70 to 80 in the final examinations when compared to preparatory examinations in the Science subject. Students generally had the opinion that the digital learning had a significant impact on their academic performance. Also, during the qualitative interactions, the stakeholders suggested for inclusion of more subjects under the initiative's offerings, especially in the subject of English language.

6. Increase Access to Periodic Assessments:

Figure 163: Positive Change felt by the Students in Academic Performance by the Use of the Tablet and the Digital Learning Content (n=264)



Students had the provision to appear for chapter-wise mock tests for a self-assessment. Students were able to revisit the curriculum as and when required. Chapter-wise practice tests, regular assessments and analysis helped all (99.6%) the students (n=264) in preparing for exams. As per the teachers, the chapter-wise and periodic assessments benefitted students in retaining the topics and brought remarkable improvements in the students' performance.





Figure 164: Chapter-wise Practice Tests being Helpful to Students in Preparing for Exams (n=264)



(n=263)

The assessments were conducted weekly or as soon as a unit or chapter was completed in the class. During our group discussions, parents informed that their kids used to get assessments after completion of each unit or once a week, and it **helped the parents to track the improvement in the students' marks**.

7. Inculcating Teamwork and Coordination:

Sharing of tablets between students helped them **develop teamwork and coordination skills** to effectively consume digital learning materials. By the design of the project, each tablet was supposed to be shared between two students only. However, during the survey with the students (n=264), it was noted that **44% students** were sharing the **tablet between more than two students**, **55% students** were sharing the **tablets between two students** and one percent responded that the **students were able to use it individually** as depicted in Figure 167. **There was no exclusion of any students** from the initiative.

During the survey (n=264), 99% students felt that the

Figure 166: Number of Students Sharing a Single Tablet during the Learning Sessions (n=264)

Figure 165: Regular Assessments and Analysis

being Helpful to Students in Preparing for Exams



Students used it individually - Two - More than two

use of tablets encourages teamwork and cooperation among classmates. However, during the qualitative interactions with the students, they stated that it would have been better if the tablet was distributed to each student instead of one tablet for two students.

In addition, **65% students** (n=264) stated that cross-collaboration efforts were also made between students and teachers while **using the tablets**. 73% students who took part in a demo (n=190) received **support from the teachers and/or taluka level volunteers during the demo sessions.** As informed during student interactions, teachers used to tether internet connection using mobile hotspot when the internet connectivity was disrupted or was intermittent during the session which helped in ensuring continuity of the session. They also stated that the teachers extended their support and guidance in understanding a topic or for resolving any technical issues as and when required.

8. Increased Interest in Studies through Student Motivation Sessions:

In addition to the educational services delivered to the students through the tablets the project also focused on the aspect of student motivation. Accordingly, **motivation sessions were organised** for the students to motivate them for their studies. 65% of the students (n=264) confirmed that motivational sessions were being organised after the introduction of tablets in their school. Of which, 94% of the students (n=171), acknowledged that motivation sessions organised were useful in building and continuing their interest in studying.

May 2024 152



Figure 167: Any Motivational Sessions Organised after the Introduction of Tablets in the School (n=264)



Figure 168: Motivational Sessions Found to be Useful by the Students (n=171)



Yes No I did not participate in any such session(s)

9. Reduction in Dropout of the Students:

As informed by the teachers, **students used to feel excited for tablet lessons which contributed to increase in participation in mathematics and science.** Prior to the project, the students had an apprehension in opting for Physics, Chemistry and Mathematics (PCM) as subjects for class 11th but after the introduction of digital learning program **students no longer hesitated to opt for PCM subjects in the class 11th.**

More than one third (37%) of the students (n=264) noticed a decrease in the number of dropouts among their classmates after the introduction of the tablet and the digital learning content. During the interaction with the Block Education officer, he stated that there was increase in the attendance of Figure 169: Decrease in Number of Dropouts among classmates after the introduction of the tablet and the digital learning content (n=264)



students and the students were very enthusiastic as they showed up for digital classes even an hour earlier than scheduled.

10. Satisfaction Level from the Usage of Digital Content among Students:

During the survey, the students (n=261) revealed their preference about the digital learning method as compared to traditional methods. 87% respondents found digital learning content on the tablets interactive and engaging. 61% respondents appreciated the flexibility available with students to learn at their own pace with an opportunity to revisit the content multiple time.

However, **81% respondents disliked disruptions caused during online sessions** due to technical problems around internet connectivity and found it to be distracting. 42% respondents felt that tablet reduced the class interaction and feedback from teachers and classmates and 29% respondents expressed increase in workload of studies and assignments due to digital learning content.





Figure 170: Likes about the Teaching through Tablets as Compared to Previous Methods * (n=261)



- I liked that the digital learning content on the tablets made learning more interactive and engaging
- I liked that digital learning content on the tablet allowed me to learn at my own pace
- I liked that tablets helped me develop digital skills

Figure 171: Dislikes about the Teaching through Tablets as Compared to Previous Methods * (n=261)



- I disliked that digital learning content on the tablets was distracting and unreliable due to technical problems like internet disconnection
- I disliked that tablet reduced the class interaction and feedback from teachers and classmates
- I disliked that the digital learning content on the tablets increased workload and assignments

*Multiple Coding Questions, Responses may add up to more than 100%

As per the survey, the students (n=264) also revealed some aspects of the project that they think could be improved with **80%** of the students desiring provision of individual tablets, **57%** of the students requesting more learning content for Mathematics and Science, **48%** of the students suggesting additional learning content for other subjects and **25%** of the students asking for more chapter-wise tests/ assessment content.



Figure 172: Aspects of the Project that Students Think could be Improved * (n=264)

*Multiple Coding Question, Responses may add up to more than 100%

During the survey (n=264), it was also revealed that almost all the **students (99.6%) developed a long-term interest in education especially in Mathematics and Science.** Students also communicated the significant improvement in their academic scores in these two subjects after the introduction of the Digital Learning Program.

As per the qualitative discussion with the students, **existing class 10th students wanted the tablets to be continued as part of education method in their following academic years as well.** The Block Education Officer (Hoskote Block) observed improvement in **students' academic scores improvement in student concentration and awareness on recent technologies.**

When requested to **rate** their **experience** with regards to the **different components and aspects of the project** on a **scale of 1 to 5** with **1 being poor** and **5 being excellent**. It was analysed that on an average 85% of the students rated all the effectiveness parameters with a rating of 4 or above as depicted below:





- **74% students**(n=264) **rated** their experience of **tablet quality** to be **5**, i.e., excellent, while 20% rated it to be 4.
- 62% students(n=264) rated their experience of content relevance to be 5, i.e., excellent, while 31% rated it to be 4.
- **48% students**(n=264) **rated** their experience of **teaching/content delivery/pedagogy** to be **5**, i.e., excellent, while 43% rated it to be 4.
- **52% students**(n=264) rated their experience of **3D animated classes** to be **5**, i.e., excellent, while 41% rated it to be 4.
- **47% students**(n=264) rated their experience of **chapter-wise practice tests** to be **5**, i.e., excellent, while 39% rated it to be 4.
- **43% students**(n=263^) rated their experience of **regular assessments and analysis** to be **5**, i.e., excellent, while 41% rated it to be 4.
- **54% students**(n=168^) **rated** their experience of **motivational session(s)** to be **5**, i.e., excellent, while 36% rated it to be 4.

^students who confirmed participating in such activities.

11. Gradual Transition from Traditional Teaching Methods to Digital Pedagogy with Upskilling of Teachers:

The project implementation laid a special emphasis on the continuous involvement of the teachers in the implementation of the programme. Teachers were involved in the implementation at all stages from being involved in the creation of the digital learning content, development and review of the digital learning content and imparting the final content to the students.

As per the implementing partner representative, **Orientation sessions were organised by Yuva Brigade and Cadcon team for the teachers** during the time of initial distribution of the tablets at the schools. In cases where new teachers joined the schools, orientation sessions on the usage of tablet and the digital learning content were organised for them on need basis. **This resulted in the gradual upskilling of the teachers and imbibing modern methods of teaching with traditional methods, incorporating digital tools into their teaching methodology and equipping them with the skills for any future interventions of similar nature.**

12. Sustained Outcomes of the Intervention:

During the qualitative interactions, majority of the respondents mentioned that the tablets and digital learning content were still in use. The implementing partner representative also informed that the tablets are still being utilised at the schools where they were distributed.

Regular feedback was sought from teachers by the Yuva Brigade team, the taluka level volunteers and Cadcon team on concurrent usage of the tablets and the utilisation of digital learning content. The taluka level volunteers visited the schools monthly and **connected with the teachers for feedback and helped them resolve any issues.**

12.4.4. IRECS Analysis

Basis the interactions with key stakeholders and desk review of the project documents, the impact of the project was also assessed on the IRECS (Inclusiveness, Relevance, Effectiveness, Convergence, Sustainability) framework parameters. The IRECS analysis summary has been presented in below table:

Table 21: IRECS Analysis





Parameter	Assessment from Study
Inclusiveness	 The project demonstrated inclusiveness by providing the access to digital education through the use of tablets irrespective of gender, and socio-economic status of the students. The schools selected for the project intervention were government schools in the rural areas with students from disadvantaged backgrounds and inadequate
	learning opportunities ensuring that the benefits are extended to the most needful sections.
	• The content was provided in the regional language (Kannada) in cognizance to their existing medium of education with an aim to bridge the digital divide with the mainstream and give them the opportunity to continue their education, especially during the Covid-19 pandemic by bringing them at par with modern education and learning methods.
Relevance	• During the Covid-19 pandemic, the class 10 th students who had to appear for their board exams were suffering due to discontinuing of regular classes. This intervention helped the students to get back on the track with their syllabus and ensuring the continuity of education among the students.
	• The selection to target students from the class 8th to 10th was done based on the volume of syllabus and complexity of the subjects as against students from lower classes. Furthermore, relevance for class 10 th students was higher since selection of subjects for class 11 th will be based on the former class's academic score of the class 10 th .
	 It also has an indirect impact on the continuity of education for students of class 10th who would otherwise dropout and become a part of early-age workforce.
	• The relevance of the content is depicted by the fact that it was prepared in alignment with the syllabus of the state boards.
Effectiveness	• The project demonstrates effectiveness due to immersive educational experience. Most students found the 3D animated classes helpful in understanding difficult concepts and more effective than the chalk and board method of teaching due to immersive educational experience.
	• The use of digital learning content increased student participation and continued engagement in the program with more than one third (37%) of the students (n=264) noticing a decrease in the number of dropouts among their classmates. Students felt excited for tablet lessons which contributed to increase in participation in Mathematics and Science classes.
	• The project developed interest in Mathematics and Science in almost all the students (98%, n=264) with 57.2% (n=264) students responding that they experienced improvement in their understanding of the Mathematics and Science.
	• Simple language and easy to understand content contributed to improved understanding and further, improved the overall performance of the students. Students (especially class 10 th) found the digital learning program to be really helpful for their preparation of examinations.
	 Almost all (n=264) the students (99.6%) found chapter-wise practice test to be helpful for preparing for their exams.
	 94% of the students (n=171) who acknowledged that motivation sessions were organized also stated that they found the motivational sessions to be useful.
	360-degree engagement of teachers ensured effective implementation. Teachers were involved from the stage of development of content to upskilling them with



Parameter	Assessment from Study		
	necessary tools and techniques to impart education via digital methods and ensuring progress with feedbacks and problem resolution opportunities.		
Convergence	• The digital content was prepared in alignment with the syllabus of the state boards. Further, the then Block Education Officer (Hoskote Block) was involved in all stages of the program, from selection of schools to development of digital content, translation in regional language and sharing regular progress for his view and consideration.		
	 The project established convergence with Panchayati Raj institutions like Zila Panchayat and Gram Panchayat to help extend internet connections to the schools where it was unavailable. 		
	• The project is complementing existing government initiative of capacity building of the teachers to use technology skills in the process of facilitating student learnings.		
Sustainability	 As informed by the stakeholders, the tablets are still being utilised at the schools where they were distributed displaying the sustainability of the project. 		
	 After the introduction of digital learning program students' hesitation was eliminated to take-up PCM subjects in the class 11th promoting a sustainable future of the students in the field of sciences. 		
	 Upskilling of teachers ensures continuity to digital methods of education making them the future-ready workforce of the education sector. 		
	• The use of tablets bridges the digital divide among government school students and makes them ready for joining the mainstream workforce in future.		

12.5. Alignment to the Infosys Limited's CSR policy and the UN SDGs

The project is **aligned with Infosys Limited's CSR policy** which includes **education as the key CSR focus area** for Infosys Limited. The project is also aligned with Sustainable Development Goal⁹³: **SDG 4 'Quality Education'** which aims to ensure inclusive and equitable guality education whilst promoting lifelong learning opportunities for all.



12.6.Study Limitation

Lack of project documents: There were no MoU and project progress reports were not shared with the
assessment team apart from the project completion certificate and a project report on the narrative of the
project and key achievements limiting the team's ability to align to a clearly defined scope of the project for
the assessment.

12.7.Case Stories

Case story:

In the realm of Kannada medium government schools, two students Rajneesh and Bhagyashree (Names changed) from government school Tavarekere found themselves grappling with the complexities of Mathematics and Science. Amidst their struggles, the transformative project 'Kai Hididu Nadesennanu' emerged as a beacon of hope offering a lifeline to revolutionise their learning experiences.

93 Source: https://sdgs.un.org/goals





Case story:

Leveraging modern technology, the project introduced lecture videos with immersive 3D animations, aimed at simplifying intricate concepts and making learning more accessible. This innovative approach proved to be more effective for Rajneesh and Bhagyashree than traditional chalk-and-board methods, leading to their increased participation and sustained engagement in class. As the project unfolded, a noticeable shift occurred in their attitudes towards Mathematics and Science. With renewed interest sparked by the dynamic learning materials, their enthusiasm for these subjects soared. Furthermore, the project's emphasis on chapter-wise assessments provided these students with valuable tools for exam preparation, empowering them to approach their studies with confidence.

The impact of the project was most vividly demonstrated in the remarkable progress of the two students during their 10th final exams. Despite earlier academic challenges, they achieved significant improvements, with Rajneesh's score rising from 60 to 74 out of 100 and Bhagyashree's score rising from 70 to 80 out of 100 in the Science subject.

This tangible evidence of academic growth underscored the effectiveness of the project in overcoming educational barriers and unlocking the students' full potential. Through targeted interventions and innovative teaching methodologies, the project not only addressed immediate academic challenges but also laid the foundation for a brighter educational future for students in Kannada medium government schools.





13. Project 10: COVID-19 Support to Gandhi Hospital



13.1.Background

While the country was recovering from the aftermath of the first Covid-19 wave in February 2021, the second wave came along with its own set of challenges. The virus, over this period, had mutated and extended itself to affect gastrointestinal and cardiac activity after impacting respiratory system in the first wave. A lightning surge was noted in the number of symptomatic cases. To add the severity of the malady, rate of recovery had taken a nosedive and fatalities were on the rise. Additionally, and consequently, an acute shortage of sufficient medical supplies, equipment and infrastructure was observed across the nation.⁹⁴

Telangana was one of the hardest-hit states in ravaging second wave of Covid-19 as this state recorded over **3.01 Lac Covid-19 cases** between April 1 to June 19, 2021. The cases recorded in these 80 days were almost **equal than total number of cases (3.10 Lakh) recorded** in the state since the inception of the pandemic (up till March 31, 2021). This period also **accounted for 52% (3,556) of the total death** toll due to Covid-19.⁹⁵ It proved to be the critical months for the state, overwhelming the public health infrastructure. During the phase, the Government was tirelessly working towards **equipping hospitals with necessary medical supplies**. **Corporates and PSUs also stepped in** to complement the government's initiatives and support a holistic upgrade to the existing medical infrastructure for critical care.

13.2. About the Project

Infosys Foundation undertook several CSR projects to augment the efforts of government in equipping hospitals with necessary medical infrastructure across the country during pandemic. One such CSR project was **'Covid-19 Support to Gandhi Medical College and Hospital (Gandhi Hospital)'**, which was an emergency support provided to **Gandhi Hospital in Secunderabad**, **Telangana**.

A schematic representation of the project specifics is depicted below:







⁹⁴ Source: <u>https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8313043/</u>

⁹⁵ Source: Ministry of Health and Family Welfare, Government of India

Figure 174: Gandhi Hospital, Secunderabad, Telangana



With a history spanning over **170 years, Gandhi Hospital is Telangana's second oldest medical facility and the seventh in the country**. As an infirmary with three wards in its inception year of 1851, it gradually increased its bed capacity to 2,200 (current capacity).

Today, the facility has three dedicated sections to provide comprehensive healthcare services:

- The **Out-Patient (OP) block** serves as the primary area for regular check-ups, allowing people to seek routine medical care.
- An Emergency block for sudden medical crises. The OP and Emergency buildings each consist of five floors.
- The Eight-floor is a dedicated **In-Patient block used**, for extensive medical care and hospitalisation.

The three buildings were devoted exclusively to handling Covid-19 cases during the pandemic as informed by healthcare staff during interactions.

Source: Official website of Gandhi Hospital and as per data collected from site-visit









Under this project, **14 ventilators and 38 BiPAP machines** were provided to **equip Gandhi Hospital with critical medical equipment.** Infosys Foundation carried out vendor selection process and accordingly, two vendors were selected for **one-time supply of the following medical equipment** to Gandhi Hospital in the month of **May 2021**⁹⁶ as noted during the interactions with Infosys Foundation:

Type of support	Quantity	Usage of medical equipment/ tool	Supply period
Ventilators for use in Intensive Care Unit (ICU)	14	A ventilator is a medical device that supports or recreates the process of breathing by pumping air into the lungs of the patient.	May 2021
BiPAP machines	38	These machines were used for non-invasive ventilation (NIV) which use mild air pressure to keep respiratory airways open.	May 2021

Table 22: Overview of Medical Equipment Provided under the Project

13.3. Method of Impact Assessment

The impact assessment study leveraged **an integrated and cohesive approach** to assess the social impact transpired since project's implementation. A **kick-off meeting was held with Infosys Foundation** to understand the nature of support under this project and gather any added requirements for starting the assessment exercise. Following the meeting, PW received following project documents from Infosys Foundation:

- Project related communications describing the requirement and usage of equipment from Gandhi Hospital
- Letter from Gandhi Hospital detailing the quantum of support provided by Infosys Foundation

PW team then began project's desk review based on the information collected during the kick-off meeting and from the project documents. This helped our team in designing the assessment framework and finalising the key stakeholders for the interactions. Further, PW team worked on developing a **structured qualitative methodology** for evaluating the project.

A **qualitative research methodology** was leveraged to assess the impact owing to the nature of this project. The support provided under this project was in the form of an emergency response and individual beneficiaries during the project period (Covid-19 pandemic) could not be traced. Qualitative research methodology in this scenario, was useful in **assessing and exploring the subjective experiences and providing in-depth information** of the individual perspectives pertaining to the project. Moreover, this exercise intends to assess perspectives and perception of the different project stakeholders involved.

Key stakeholders were identified and tailored research tools were prepared for each stakeholder to guide the interactions with them. Evaluation frame for the study was as follows:



⁹⁶ Source: Letter from Gandhi Hospital detailing the quantum of support provided by Infosys Foundation

Figure 175: Qualitative Research Design for the Study



Once the stakeholders were identified and the research tools prepared, an **on-site visit to the hospital** was conducted to run the questionnaires with the respective stakeholders. Total **eight interactions** were concluded including one **virtual interaction** as mentioned below:

- 1. Three In-depth Interview (IDIs) with healthcare staff at Gandhi Hospital
- 2. One IDI with admin representative at Gandhi Hospital
- 3. Three IDIs with current patients at Gandhi Hospital (Due to the data confidentiality, patients' data was not requested from the Gandhi Hospital as a practice. However, team was able to interact with a few patients during our visit to Gandhi Hospital facility to understand the impact of overall healthcare services offered during the pandemic.)
- 4. One IDI with the project team of Infosys Foundation

The responses collected from the stakeholders' interactions were then corroborated and analysed along with desk review to arrive at the detailed findings as depicted in the next section on 'Analysis & Findings'.

13.4. Analysis & Findings

Based on our interactions with the stakeholders and desk review of project documents received from Infosys Foundation, research team has summarised the findings of the study as below:

13.4.1. Challenges Before the Project

The second Covid-19 wave presented various challenges to the healthcare systems **demanding unprecedented preparedness towards emergency care and disaster response**. The first milder wave could not have predicted the massive downward spiral of the situation, the second wave posed in anyway. During this period:

- State-run Gandhi Hospital was designated as a nodal center for Covid-19 to treat and provide critical care to Covid-19 patients. The entire capacity of Gandhi hospital of 1,890 beds was converted to Covid-19 facility which meant that each hospital bed was required to be equipped with **all Covid-19 essential equipment**. However, the prices for this equipment and the delivery span had considerably increased due to increased demand-supply gap which **added to the dismal condition of the existing capabilities** of Gandhi Hospital.
- The second Covid-19 wave largely impacted the age bracket of 25-50 years⁹⁷ and subsequently, caused increased demand for intensive care units and critical care. Many private hospitals were not able to admit Covid-19 patients (in need of oxygen and ICU support) during this wave due to increased pressure on critical care units. To provide critical care to such patients, Gandhi hospital planned to set up a new ICU ward at the hospital to treat Covid-19 patients. However, it further caused strain on the hospital as it started facing shortage of critical care equipment (such as ventilators and BiPAP machines).



⁹⁷ Source: <u>https://www.thelancet.com/action/showPdf?pii=S2213-2600%2821%2900312-X</u>



13.4.2. Summary of the Impact Created

Acknowledging the urgency during this crisis, the collaborative efforts between the Infosys Foundation and Gandhi Hospital ensured preparedness for emergency circumstances, highlighting a commitment to the well-being of the community. Support by Infosys Foundation not only assisted in magnifying the reach of the hospital, but providing the patients with timely health care efficiently, as mentioned below:

 Emergency Preparedness and Disaster Response: Following detailed discussions, Gandhi Hospital identified urgent and growing requirements of Covid-19 patients for advanced respiratory care. This equipment was required to set-up a new Intensive Care Unit (ICU) ward at Gandhi Hospital. Based on these requirements from Gandhi Hospital, Infosys Foundation took proactive steps to address the emergent needs and supplied the required equipment of ventilators and BiPAP machines in timely manner as informed by healthcare staff at Gandhi Hospital.

This support was need of the hour, given the **sudden surge in patients requiring specialised care** due to the second wave. Hence, it was **important to immediately procure the equipment** to address the shortage of medical equipment for new ICU ward. There were also added difficulties in procuring medical devices due to high demand, however, **ventilators and BiPAP machines were delivered in a span of 1 week (7-8 days)** from the date of purchase order. It led to the immediate setup and usage of equipment which enabled government to tackle the rising cases of Covid-19 by utilising timely availability of required equipment. Given that the times were unprecedent and there was a possibility of another wave in near future, support from Infosys Foundation helped the hospital in **emergency preparedness and disaster response.**

2. Strengthening Access to Quality Services at an Affordable Cost: Support towards additional equipment for the hospital not only reduced the financial burden of the state-run Gandhi hospital but also strengthened its commitment to providing free and low-cost emergency care to patients in need. Notably, all emergency surgeries were performed without any charges to the patients. Not only did this make healthcare accessible, but also affordable for people at a time when the medical infrastructure was overwhelmed, and the hospitals were flooded with patients in need of critical care.

In such a scenario, if such free of cost support or care was unavailable, a financially vulnerable section of the society would not have access to medical care. As an alternative they would have had to opt for private healthcare, which would have either led them to **not seek medical support** or **pay an exponentially higher price for quality treatment**. One patient during the interactions quoted that they prefer Gandhi Hospital for their treatment owing to its **longstanding history, reputation as a government hospital in the state, and provider of cost-friendly treatments catering to all socio-economic backgrounds.**

"As a designated Covid-19 nodal hospital in Telangana, this support played a pivotal role in strengthening the mission of Gandhi Hospital in offering specialised care to Covid-19 patients. 14 ventilators from Infosys were crucial, as we feel that saving one life was immensely significant considering high death rates during the period. Similarly, urgent needs of Covid-19 patients were met timely through timely availability of BiPAP machines, showcasing our commitment to address healthcare needs during the pandemic."

- As narrated by Healthcare Staff of Gandhi Hospital during interactions



3. Enhanced Healthcare Infrastructure:

Infosys Foundation provided 14 ventilators for a 65-bed ICU dedicated to treat Covid-19 patients. This support played an instrumental role, as there was no other hospital deployed by the government offering free and quality treatment to Covid-19 patients in the nearby vicinity. Gandhi Hospital was also the only Government hospital in the state with a 65-bedded ICU ward facility catering towards critical and emergency Covid-19 cases. This time bound support from Infosys Foundation contributed to the collective impact created by Gandhi Hospital during pandemic as the Hospital was able to treat over 100,000 patients as informed by the admin representative at Gandhi Hospital ⁹⁸.

Being the primary Covid-19 hospital in Telangana, it provided specialized care exclusively to Covid-19 patients, serving as the main state-run tertiary care (Covid care) center in Telangana. To accommodate the increased number of patients **during the second wave, the hospital converted its entire capacity of 1,890 beds, including** Figure 176: Ventilator provided by Infosys Foundation



the 650 ICU beds equipped with 538 ventilators to Covid-19 care facility. However, with an influx of patients in need of treatment, and as the only available facility offering Covid-specific treatment, the available equipment with the hospital proved to fall short. The support by Infosys Foundation helped cover the demand-supply gap to effectively serve Covid-19 patients. As informed by the healthcare staff at Gandhi Hospital, approximately 50,000 patients were treated using ventilators, including those provided by Infosys Foundation during Covid-19.

This support also contributed **collectively towards comprehensive patient care** for various emergency cases associated with Covid-19, including **trauma cases**, **pregnancies**, **pediatric cases**, **kidney failure**, **cardiac issues**, **liver problems**, **strokes**, **and neurological emergencies**. Notably, ventilator support was also provided to **pregnant Covid-19 patients during deliveries to manage maternal-fetal complications and addressing the need for respiratory support**. As informed by healthcare staff at at Gandhi Hospital, close to **4,000 successful deliveries were concluded during the pandemic at the hospital**, wherein other hospitals were hesitant in admitting pregnant women with Covid-19.

In addition, BiPAP machines provide advanced breathing assistance for severe respiratory cases and easing out the breathing difficulties. In total, the hospital had 100 such BiPAP machines available, however, additional machines were required due to urgent shortage of equipment at the time of the second wave. With critical respiratory care required in a short time span, BiPAP machines had become the need of the hour.

Infosys Foundation supplied **38 such machines in the 65-bed ICU** for Covid-19 patients at the hospital during the second wave. It was noted that **3,762 paediatric patients with Covid-19**, were treated during the pandemic. Such ailments were commonly seen among patients with lower age group. Many cases required support of BiPAP machines for treatment as informed by healthcare staff during our interactions. Figure 177: BiPAP machines provided by Infosys Foundation



⁹⁸ Starting FY 2019-20 up till FY 2021-22



Adequate deployment of these machines enhanced the hospital's capabilities to provide advanced respiratory care, especially post surgeries. These machines also played a key role in supporting non-invasive ventilation (NIV) to individuals requiring assistance in breathing. In numerous cases, patients received NIV support through BiPAP machines after ventilator assistance.

In case, if this support was unavailable to the hospital, the hospital would have had to request for the machines from the government. This would have led to a **possible delay in supply and adequate availability of equipment for patient care during the second wave.**

Currently, the **ventilators are not in working conditions** and have been stored within the hospital premises. **BiPAP machines although functional are also stored in the hospital premises** kept for being used as and when required. This is due to **low requirement for the equipment after the pandemic** as informed by admin representative and healthcare staff at Gandhi Hospital. In this project,

- Gandhi hospital received ventilators and BiPAP machines from Infosys Foundation with a two-year warranty which included one-time cost with no recurring expenses for maintenance. During and after the project period, when the hospital faced any technical issues (such as O2 sensor failures and other problems) with ventilators, there was no response from vendors (who supplied these equipment) despite reaching out to them multiple times for resolving maintenance issues.
- To address these challenges, the hospital sought support from the technicians responsible for maintaining the ventilators provided by government. Whenever the team of technicians came for the maintenance of government ventilators, the hospital leveraged their support and expertise to address small technical issues/ glitches in the ventilators provided by Infosys as well.
- The hospital handled ventilators from three sources: government supply, direct purchase, and CSR support. Maintenance for **government and directly purchased equipment is often included and agreed with vendors** at the contracting stage. The hospital admin representative stated that they generally face a financial challenge maintaining CSR supported equipment due to a lack of dedicated funds with the hospital. The government typically provides **maintenance support for three or four years**, but in this case, recurring costs (specifically to resolve maintenance issues) for ventilators **posed a challenge for Gandhi Hospital**.
- 4. Increased operational capabilities of the hospital: Gandhi Hospital faced administrative and operational challenges given the overwhelming flow of patients. However, Gandhi Hospital not only catered to patients from Telangana, but also increased access to patients from Andhra Pradesh, Karnataka, and Maharashtra, among others. Foreign nationals diagnosed with Covid-19 at the Hyderabad airport were also brought to Gandhi Hospital facility for treatment.

Infosys Foundation's contribution complemented significantly to the government support of ventilators provided to efficiently manage the situation. Ventilators and BiPAP machines supplied by Infosys Foundation **eased the workload on hospital staff.** This was evident in the dedication of the entire hospital staff, especially departments like general medicine, pulmonology, and anaesthesia as they worked towards providing uninterrupted healthcare services during the crisis. The enhanced capacity allowed for more streamlined patient care and efficient utilisation of resources. It also **contributed to an increase in the hospital's overall treatment capacity.** This allowed the hospital to cater to more Covid-19 patients, including those with severe respiratory issues.

13.4.3. IRECS Analysis

Basis the interactions with the key stakeholders and desk review, **the impact of the project was also assessed on the IRECS framework parameters**. The IRECS analysis summary has been presented in below table:

Table 23: IRECS Analysis





Parameter	Assessment from study
Inclusiveness	 The project demonstrated inclusiveness by providing free-of-cost treatment to Covid-19 patients irrespective of their age, gender, and socio-economic status. The additional equipment provided by Infosys Foundation helped in ensuring that all emergency surgeries were undertaken, and treatment related to Covid-19 was accessible to everyone in need. The project provided accessibility of treatment during the pandemic to marginalized sections of the society with limited means and availability of quality treatment. This was also important with Gandhi Hospital being the state nodal hospital for Covid-19 treatment, with an influx of people seeking treatment.
Relevance	 During the multiple Covid-19 waves, the strain on healthcare infrastructure was evident across the globe. Infosys Foundation's support, offering ventilators and BiPAP machines, proved crucial for Gandhi Hospital in addressing the pressing need for critical care equipment support during the second phase of the pandemic. Notably, patients were provided treatment without any charges. This made treatment affordable for patients at a time when the medical infrastructure was overwhelmed, and hospitals were flooded with the need of critical care. In a scenario, where such free of cost support or care for those in need was unavailable, a financially vulnerable section of the society would not have access to medical care. As an alternative they would have had to opt for private healthcare, which would have either led them to not seek medical support or pay an exponentially higher price for quality treatment.
Effectiveness	 Gandhi Hospital, serving as the primary state-run tertiary care centre in Telangana, had a capacity of 1,890 beds during the project period, including 650 ICU beds equipped with 538 ventilators and 100 BiPAP machines during the second wave. Infosys Foundation's contribution of 14 ventilators and 38 BiPAP machines, highlights the project's effectiveness as it contributed to the collective impact created by the hospital in meeting their increased Covid-19 patient load. The ventilators in ICUs treated around 50,000 patients during the pandemic. This support also contributed towards comprehensive patient care for various emergency cases associated with Covid-19. Notably, ventilator support was provided to pregnant Covid-19 patients during deliveries to manage maternal-fetal complications or need for respiratory support. Close to 4,000 successful deliveries were concluded during the pandemic at the hospital, wherein other hospitals were hesitant in admitting pregnant women with Covid-19. Infosys Foundation supplied 38 such machines in the 65-bed ICU for Covid-19 patients at the hospital during the second phase. Such ailments were commonly seen among patients with lower age group. It was noted that 3,762 paediatric patients with Covid-19, including children up to 12 years old were treated during the pandemic. Many cases required support of BiPAP machines.
	provide advanced respiratory care, especially post surgeries. These machines also played a key role in supporting non-invasive ventilation (NIV) to individuals requiring assistance in breathing. The impact extended beyond state and national borders, accepting patients from nearby states and foreign nationals seeking Covid-19 treatment during their visit in the country, demonstrating the effectiveness of collaborative efforts.



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Parameter	Assessment from study	
Convergence	 Gandhi Hospital is a government hospital and hence, this support from Infosys Foundation aligned with the government's efforts towards combating Covid- 19. This partnership with government administration helped in fulfilling the larger community needs, thus, making it convergent to existing government healthcare efforts. 	
Sustainability	 In this project, the hospital received ventilators and BiPAP machines from Infosys Foundation with a two-year warranty. It was a one-time cost with no recurring expenses for maintenance. 	
	• Ventilators due to overuse in the pandemic, began facing technical issues during and after the project period. However, to address challenges faced with the ventilators, the hospital sought support from the technicians responsible for maintaining the ventilators provided by government from the same company. This was due to no response from the vendors who provided ventilators under this project. Ventilators are currently non-functional and have been stored in the hospital premise as there is no dedicated fund available with Hospital to resolve the maintenance issues of ventilators.	
	• While the BiPAP machines are functional , they too are stored in the hospital premises . This is because the hospital does not require as many machines since the offset of the pandemic. However, if BiPAP machines require maintenance in near future , it is expected that the hospital may face a challenge due to a lack of dedicated funds as informed by healthcare staff.	
	• Typically, the government provides maintenance support for three or four years, but maintenance costs for CSR-funded equipment posed a challenge for Gandhi Hospital from sustainability perspective .	

13.5. Alignment to the Infosys Limited's CSR policy and the UN SDGs

The project is aligned with Infosys Limited's CSR policy which includes healthcare as one of the key CSR focus areas for Infosys Limited. The project is also aligned with Sustainable Development Goal⁹⁹: SDG 3 "Good health and Well-being" and SDG 17 "Partnership for the Goals". SDG-3 emphasises on ensuring health life and promoting well-being for all at all the ages, with a specific focus on strengthening healthcare systems.



Similarly, SDG-17 focusses on strengthening the means of implementation and revitalise the global partnership for sustainable development. By addressing the pressing healthcare challenges posed by the Covid-19 pandemic through a collaborative partnership, this project has contributed to the overarching goal of good health and well-being.

13.6.Study Limitations

- Lack of Project Documents: There was only limited data available with Gandhi Hospital to site quantitative impact with regard to the overall patients treated during the pandemic, and patients treated only leveraging Infosys Foundation's support through the ventilators and BiPAP machines. The data provided helped us understand the collective impact during the pandemic which, however the specific to the project impact was unavailable.
- Difficulty in connecting with patients and healthcare staff: It was challenging to locate and engage with COVID-19 patients at Gandhi Hospital who directly benefited from Infosys Foundation's support due to ethics and data confidentiality. This limited the study's ability to collect primary data on the assistance provided. Interacting with patients at Gandhi Hospital posed challenges as they were undertaking treatments at the time of the interviews. Moreover, the healthcare and administrative staff was deeply



⁹⁹ Source: https://sdgs.un.org/goals



engaged in managing scheduled operations made it hard to hold detailed conversations on how Infosys Foundation's support affected the hospital's operations and patient care during COVID-19 times.

13.7.Case Stories

Following case stories were gathered during the discussions held with Gandhi Hospital team:

Case story: Renewed Strength – Speedy Recovery of a 65-year-Old Lady

A 65-year-old woman was admitted to Gandhi Hospital with comorbidities during the second wave of Covid-19. Started as a **minor fever and cough with under-control symptoms**, her situation **quickly worsened into serious lung and respiratory disorders.** An immediate need for breathing support was identified by Gandhi Hospital.

She was admitted to the intensive care unit for a larger duration of her illness. While she survived the worst part of the illness, she was left with the aftermath of Covid-19 causing fatigue and weakened breathing. **65-70% of her lungs were impacted** due to the prolonged illness. With **continued therapy on BiPAP machines**, she was able to recover and go back to her family to lead a normal life.

Case story: A New Life for a 100-year-old Man

100-year-old man who was tested **Covid-19 positive**, got admitted in the hospital due to **low oxygen level** which was a common problem due to the Covid-19 virus.

When he arrived, his medical condition was serious due to his age. The medical team worked hard using oxygen therapy, ventilator support and other available treatments at the hospital through urgent critical care by experienced doctors at the facility. Eventually, with **prolonged care his oxygen levels improved to a good 97%**, showing he responded well to the treatment.

After testing negative for Covid-19, **doctors decided to keep him under observation** in the regular ward for a bit longer **due to his age**. He was **discharged with good health and gained speedy recovery** because of the **treatment support received at the hospital**.





14. Project 11: Provision of Tablets for 10th and 12th standard students to ensure continuity and performance in their studies- 2020-21



14.1.Background

Starting in February 2020, the rapid proliferation of COVID-19 had an unparalleled impact on education systems around the world. India like all other countries had to shut down colleges and schools while promoting online classes and learning, to avoid community transmission. The pandemic and school closures widened the gap in educational inequality while also exacerbating existing disparities. According to UNICEF, the pandemic and lockdowns related closure of schools in March 2020 had impacted approximately 286 million students (48 per cent girls) from pre-primary to upper secondary education.100

A sizeable proportion of the Indian populace lacked the essential resources, such as devices, infrastructure, and digital literacy, to adapt to the transition towards remote learning during Covid induced lockdowns. Prior to the pandemic, only one-quarter of Indian homes (24%) had internet connectivity, only one in every four children had access to digital devices and internet connectivity, making online education unattainable for many.101 This was observed across the nation during school closures as 42% of children in India between 6-13 years reported not using any type of remote learning during school closures102.

14.2.About the Project

In its long legacy of Corporate Social Responsibility (CSR), the Infosys Foundation has undertaken numerous programmes to promote efforts in the field of education. The commitment and efforts of Infosys foundation remained evident even throughout the pandemic as it carried out multiple projects to support the education sector. One such CSR project is **"Provision of Tablets for 10th and 12th standard students to ensure continuity and performance in their studies-2020-21"** which supported the academic need of 10th and 12th standard students across Karnataka, Puducherry, and Tamil Nadu. The project's objective was **to distribute 1,300 tablets to meritorious but economically disadvantaged students of 10th and 12th standard to ensure continuity in their education during Covid-19.¹⁰³ A schematic representation of the project specifics is depicted below:**



Figure 178: Schematic Representation of Project Specifics



¹⁰⁰Source: <u>https://www.unicef.org/india/media/6121/file/Report</u>

¹⁰¹ Source: https://www.unicef.org/india/press-releases/covid-19-schools-more-168-million-children-globally-have-been-completely-closed

¹⁰² Source: https://www.unicef.org/rosa/press-releases/repeated-school-closures-due-covid-19-leading-learning-loss-and-widening-inequities.

¹⁰³ Source: Project report shared by Dhwani Foundation



Dhwani Foundation finalised lead NGOs from across Karnataka, Puducherry, and Tamil Nadu with expertise in educational project management and covered rural and remote villages. Lead NGOs played a major role in identification and screening of students, alongside concurrent support of 74 implementation NGOs. Implementation NGOs identified student beneficiaries in the community, filled application forms, collected

Figure 179 : Project Locations



documents from students for background checks, organized tablet distribution project in the community under the guidance of lead NGOs. Gram Panchayats were also contacted by implementing NGOs to disseminate the details of the project with families to apply for this project. These implementing NGOs were selected basis following parameters:

- They should have worked in the field of school education in last five years.
- NGO should have been associated with the family of the student beneficiary through any other initiative in the last one year or more.
- They should have a designated person to manage the Infosys project.



Figure 180 : Project Implementation process



Table 24: List of Lead NGOs and No. of Tablets delivered

#	Lead NGOs	States of operation	Tablets Delivered
1	Agastya International Foundation	Karnataka	100
2	Chilume Social Service Society	Karnataka	160
3	FEVOURD K	Karnataka	130
4	Satya Special School	Puducherry and Tamil Nadu	90
5	Vidya Poshak	Karnataka	520
6	Khushi Trust	Karnataka	300
To	tal	1,300	

For the selection of beneficiaries, a set of criteria was developed by core team at Lead implementing partner which is depicted below.

Figure 181 : Selection criteria for the beneficiaries



Lead implementing partner also developed special Management Information System (MIS) through Goonjan Software for data management and decision-making process, adapted technology to track each student's usage of tablets through Samsung Knox software and partnered with Ahana Systems and Solutions Pvt Ltd to provide technical assistance to all students.

14.3. About Implementing Partner

To implement this project, Infosys Foundation partnered with Dhwani Foundation, an NGO founded in the year 2006 headquartered in Bengaluru, Karnataka. As part of its organisational approach, Lead implementing partner aims to strengthen, improve productivity and efficacy of the social sector through direct and indirect engagements with key stakeholders. It is focussed on small and rural organisations who are hard pressed to adapt to the rapid changes in the sector. They strive to create an effective, efficient, vibrant, and credible social sector, supporting NGOs, foundations, governments and other stakeholders through change management programmes, technological solutions, support services and strategic collaborations.





14.4. Method of Impact Assessment

The impact assessment study leveraged **an integrated**, **cohesive**, **and consultative approach** to assess the social impact of Infosys Foundation's CSR project implemented by Lead implementing partner. A **kick-off meeting was held with Infosys Foundation** to align on modalities of the project supported and arrange for any additional requirements for starting the assessment exercise. Following this meeting, PW received following **project documents** from the Infosys Foundation team:

- 1. Project completion report
- 2. Sample of MoUs between Lead NGOs and implementing NGOs

A desk review was conducted to understand the project's progress for the assessment period. Subsequently, stakeholders were mapped for data collection for both quantitative and qualitative research methods.

In consultation with Infosys Foundation, mixed methodology (quantitative and qualitative research methodologies) was deployed to undertake the impact assessment study. The quantitative study focused on generating insights and evidence related to the current and expected impact. The qualitative data was leveraged to translate observations, perspectives, and experiences into valuable understandings of the actual impact. Hence, in addition to the quantitative research tools such as Computer Aided Telephone Interviews (CATI) tool i.e., virtual interactions with the students, qualitative research tools in the form of Indepth Interviews (IDIs) with the parents of such students were also deployed.

An **assessment framework** was then developed for the assessment, following which the PW team identified the key stakeholders, and sample for data collection in consultation with Infosys Foundation. Sample size and stakeholder interactions are as below:

Figure 182 : Stakeholder mapping and sampling framework



Data collection for the project was conducted virtually to administer tools with the respective stakeholders. Post the data collection, data entry, cleaning and analysis was carried out to arrive at the key insights from the impact assessment study. Responses were then analysed along with corroboration with secondary/desk research findings to arrive at detailed findings as depicted in the next section on <u>Analysis and Findings</u>.





14.5.Analysis & Findings

Based on our interactions with the project stakeholders, survey undertaken with project stakeholders and desk review of the project documents provided by Infosys Foundation, the research team has summarised the findings from the assessment as below:

14.5.1. Challenges before the project

As discussed earlier, the project catered to students from financially weaker sections of the society. During the discussion with the stakeholders and as part of the desk research, the team identified the following challenge prevalent before the intervention:

1. Covid-19 pandemic, apart from being a medical catastrophe around the world, had also impeded education system. The impact was particularly severe when the students came from economically marginalised communities with no means to afford access to their regular classes or educational content via digital mode. Lockdown imposed during pandemic forced the education system to conduct online classes for larger section of the society, however, a larger part of the disadvantaged communities had absence of such digital learning devices and limited connectivity. This situation warranted an immediate intervention to provide for devices such as tablets or laptops and ensure that learning never stops.

14.5.2. Profile of the Respondents

As per the research design and the sampling plan, **a CATI-based quantitative survey was conducted with 226 student beneficiaries**. A brief profile of the respondents of the survey is as follows:

- 68% of the respondents (n=226) were female students, while 32% respondents were male. Further, the average age of the respondents was around 18 years.
- 94% of the respondents (n=226) are currently in colleges pursuing their graduation degree or a diploma. 5% of the respondents did not continue their education due to lack of funds to pursue higher education or opted for vocational jobs to provide financial support to their families. 1 respondent (~0.4% of the respondents) was still studying in 12th standard at the time of the survey.



Figure 183 : Gender-wise split of the respondents (n=226)



Figure 184 : Respondents' current class / standard





14.5.3. Summary of the Impact Created

Based on the interactions with the survey respondents and the other stakeholders along with desk review of project documents received from Infosys Foundation, research team has summarised the impact of the project as follows:

3. Ensuring uninterrupted digital learning during Covid-19

- 81% of the respondents (n=226) asserted not having access to any kind of digital learning device before the project. 19% respondents had access to some form of digital learning device before the project as well. However, when probed further, these respondents (n=43) agreed that often these devices included smart phones only. Hence, evidencing the fact that there was a lack of proper digital learning devices among the beneficiary students to cope up with the pandemic induced online learning environment.
- Moreover, 86% of the respondents (n=226) propounded that before receiving the tablets as part of this project, their studies were hampered during Covid-19 pandemic. On probing further, almost all (~99.5%) the respondents (n=226) agreed that they felt that having a tablet had a positive impact on their learning outcomes during Covid-19 pandemic as they were able to access learning content while physical classes were suspended.
- When asked on what would have happened in case the tablets provided as part of the project would not
 have been received by them, 46% of the respondents (n=226) believed it would have impacted their
 academic performance negatively. 26% respondents each highlighted that either they would have
 had to drop out of their schools or would have had to arrange for an alternative digital learning tool.



Figure 185 : Students' response on how they would have managed in absence of the tablet support

4. Improved academic performance

Almost all the respondents (n=226) agreed that the tablets provided them with an ease of access to
learning content online while also helping them improve their scores in exams. This exemplifies the
fact that these tablets have been instrumental in providing impetus to the academic performance of the
beneficiary students. 97% of the respondents (n=226) reported that having access to the online content
through the tablets have helped them learn new topics in Science, Mathematics and English subjects.

Respondents agreed that tablets have provided them with an ease to access the digital learning content. (n=226)
Respondents agreed that tablets have helped them score better in their exams. (n=226)



"Having access to the learning material on the tablets has certainly helped my daughter score better in exams. She has been a class topper in the 10th standard."

- As narrated by parent of one of the beneficiary students
- Further, 96% of the respondents (n=226) agreed that having access to tablets improved their academic performance, especially during the Covid-19 pandemic. Only 4% respondents reported that there was no significant change in their academic performance. Also, 95% of the respondents (n=226) propounded that having a tablet has also been helpful to them in giving various online examinations and assessments. This was of immense help for students preparing to appear for competitive examinations and pursuing education following 10th and 12th standard.
- 5. Equipping future generations with modern learning methods
- 98% of the respondents (n=226) agreed that the tablets and using them for their learning has further motivated them towards using technology in the future. 99% of the respondents (n=226) agreed that having access to tablets will benefit them in their education in future as well.
- Majority of the respondents developed inclination towards digital learning methods, 85% (n=226) agreed that they would prefer learning from tablets than the traditional methods (such as chalk and board). Parents further affirmed that their children learnt how to access the content online which was not the case earlier, which lead them to learn and explore more learning content on their own around topics taught in their classes.

Figure 186 : Preference of tablets over traditional learning methods (n=226)



Figure 187 : Provision of training on operating the tablets (n=226)



- 60% of the respondents (n=226) agreed receiving training from the respective implementing NGOs on usage of the tablets. However, 40% respondents had no recollection of any training provided on how to operate the tablets. Out of the respondents who agreed that they had received the training (n=135), almost all rated the training to be sufficient, and they did not require any further assistance from any other person or agency in operating these tablets.
- 85% of the respondents (n=226) did not face any technical issue while accessing data on tablets. Balance 15% (n=35) primarily noted issues with either connectivity or software. The potential reason for connectivity issues could be associated with the project beneficiaries residing in remote areas of Karnataka. However, most of the respondents (n=35) agreed that the issue was indeed rectified by themselves through available online tutorials.



Figure 189 : Specific nature of issue faced (n=35)



6. Satisfaction levels of students from the program:

The respondents (n=226) were also asked to rate the tablets on aspects such as ease of usage, quality
of the tablets, and impact of the tablets on their studies. The rating was to be given on a 5-point scale
with 1 being the lowest and 5 being the highest rating. The average response on each of these
parameters is as depicted below:

Figure 190 : Average respondent rating (n=226)



• When asked on what specific aspects of the project could have been better, 47% of the respondents (n=226) could not point out any such improvement area. Some of the respondents (n=133) believed the quality of tablets distributed could have been slightly better, while some felt that the technical support in cases of breakdown, training at the time of handing over the tablets and the learning interface in the tab could have been improved. Certain other respondents felt that provision of a laptop instead of a tab would have been better. These respondents believed that once they move to the college for their graduation or diploma degrees, a laptop will be more useful than the tab.



Figure 191 : Project aspects that could have been better (n=133)





79% of the respondents (n=226) agreed that although the tablets were distributed with an objective to
provide the students with digital learning tools during Covid-19 pandemic, they are using the tablets even
now for their higher studies. This showcases that there has been continued usage of the tablets even
beyond the intended period. On probing further, of these respondents, 80% are still using the tablets
(n=179) on a daily basis.



Out of the students still using the tablet (n=179), 42% reported spending around 31 minutes to 1 hour on an average on tablets daily. 36% spend more than an hour, 21% spend 16 minutes to 1 hour, while 1 respondent spends less than 15 minutes. This indicates substantial usage of these tablets by students. Further, usage of the tablets includes (n=179) (i) "Watching educational videos" (92%), (ii) "Attending online classes" (84%), and (iii) "Access online curriculum" (72%). This indicates that the tablets have been used effectively and have been able to fulfil the objective with which they were distributed after cessation of the project.



Figure 194 : Average time spent Figure 195 : Various ways of utilisation of tablets (n=179) on tablets daily (n=179)

One of the other impacts of the tablets has been community learning. Representatives from Lead
implementing partner as well as from one of the lead NGOs, during the qualitative interactions, informed
that the students who received the tablets have become agents of change within their community.
There have been instances where such students have started teaching other students from within
the community through the tablets. This has therefore had a multiplier effect on the overall impact.

21%

42%

> 60 mins

31 mins – 60 mins

16 mins – 30 mins
 0 – 15 mins

36%





"We have come across instances where a beneficiary student has become an agent on change within her community. She has started teaching a group of needy students from primary to middle classes within her community through the app while also managing her own studies."

As narrated by the Lead implementing partner representative

14.5.4. IRECS Analysis

Based on interactions with key stakeholders and desk review of the project report, impact of the project has also been assessed on the IRECS (Inclusiveness, Relevance, Effectiveness, Convergence, Sustainability) framework parameters. The IRECS analysis summary has been presented in below table:

Table	25:	IRECS	Analysis
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Parameter	Assessment from Study		
Inclusiveness	 During the interaction, it was noted that a majority of the beneficiaries came from socio-economically disadvantaged groups with limited to no means of accessing digital education in absence of such support as provided by Infosys Foundation. Further, this project has been a gender inclusive initiative with 68% respondents 		
	to be female student beneficiaries.		
	• Lead implementing partner developed a fair and transparent criterion for selection of the beneficiary students. This ensured that the project's benefits could reach out to students who were meritorious and were in the actual need of a digital device to help them in their studies.		
Relevance	• Covid-19 induced lockdown in the country necessitated the need for the educational institutions to shut down their in-person classes. This hampered the students' continuous learning process, especially from the financially marginalised backgrounds. Hence, the support from Infosys Foundation in the form of tablets to meritorious but economically disadvantaged students was timely and catered to this very issue.		
	• During the survey, 81% of the respondents (n=226) reported that they did not have access to any kind of digital learning device prior to the support from Infosys Foundation. While 19%, who did have this access were using their parents' smart phones to access online educational content.		
	• When asked on what would have happened in case the tablets would not have been provided as part of this project, 46% of the respondents (n=226) believed it would have impacted their academic performance negatively. 26% respondents each highlighted that either they would have had to drop out of their schools or would have had to arrange for an alternative digital learning tool. This showcases that the support was pertinent and relevant to the need of the hour.		
	• There is a pressing need to equip the future generations with much needed digital learning skills to which these projects can be a leading example.		
Effectiveness	The project was able to effectively mitigate the challenges posed to the education ecosystem by the Covid-19 pandemic . Certain instances to highlight the effectiveness of the project as evidenced by the survey are as follows:		
	• During the Covid-19 epidemic, almost all the respondents (99.5%, n=226) believed that possessing a tablet improved their learning since it allowed them to access course materials online while in-person instruction was interrupted in schools.		
Parameter	Assessment from Study		
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	• Students have been utilizing the tablets for a variety of things since they received them, including "Watching educational videos" (92%, n = 226), "Attending online classes" (84%, n = 226), and "Accessing online curriculum" (72%, n = 226).		
	• All respondents (n = 226) stated that the tablets improved their exam scores and made it simple for them to access digital and online learning resources for reference.		
	 96% of respondents (n=226) concurred that having tablets at their disposal helped them perform better in school academically, particularly during the Covid-19 pandemic. 		
	• The students' interest in the tablets has also contributed to their inclination toward digital education and given them opportunities to pursue new interests within the disciplines of their choice. 99% of respondents (n=226) agreed that possessing tablets will help them in the future with their studies. Furthermore, 98% of respondents (n=226) were of the opinion that utilizing tablets for education had increased their motivation to use technology going forward.		
	• 85% of the respondents (n=226) agreed that they would prefer learning from tablets than the traditional methods (such as chalk and board).		
	• The tablets were also rated highly on aspects such as such as ease of usage, quality of tablets, and their impact on studies. They rated the tablets 4.6, 4.5, and 4.8 on these 3 parameters, respectively. The rating was on a 5-point scale with 1 being the lowest and 5 being the highest.		
Convergence	• The project complements Government's efforts of improving digital infrastructure across the country through its Digital India campaign.		
	 Moreover, the efforts also complemented the existing efforts of other civil society organisations and NGOs to mitigate the crisis and provide continued educational support to the students across the country. The on-ground implementing NGOs were also supported by the local Gram Panchayats in certain regions during the identification and selection of the beneficiary students, thus evidencing convergence at the grassroot level. 		
Sustainability	• During the interaction, the respondents highlighted that 78% of them (n=226) are still using the tablets, with 80% of those (n=176) using it daily. Given the fact that even after 2-3 years post the distribution of the tablets, these students are still using the devices, it is a testament to the quality of the tablets provided as part of the support.		
	• Further, the use of tablets as a digital learning tool has opened further avenues for the students, who can now learn and discover more topics of interest. 99% of the respondents (n=226) agreed that having access to tablets will benefit them in their education in future as well.		

14.6.Alignment to the Infosys Limited's CSR policy, and UN SDGs

 The project is aligned with Infosys Limited's CSR policy which includes education, as the key CSR focus areas for Infosys Limited. The project is also aligned with Sustainable Development Goal¹⁰⁴: SDG 4 "Quality Education", SDG-4 aims to ensure inclusive and equitable quality education, whilst promoting lifelong learning opportunities for all.





¹⁰⁴ Source: <u>https://sdgs.un.org/goals</u>

14.7.Study Limitation

• Limited stakeholder mobilisation: The mobilisation of the beneficiaries was done with support from Dhwani Foundation and the lead NGOs on ground. Since the project was implemented 2-3 years ago, tracing back the contact details of students was a significant challenge. This provides a skewed result for the random sampling methodology adopted.

14.8.Case Stories

Following case stories have been gathered in discussions with the Lead implementing partner representative:

Case story 1: Navigating through the challenges

Kishore (name changed) hails from Bangalore and was in class XIIth when the tablets were distributed. He comes from a humble family background where his mother is a homemaker while his father works as a tailor at a shop. Throughout his schooling, Kishore has been a meritorious student securing 98% marks in class Xth boards and was a school topper. He has always been interested in learning new things and had set a goal for himself to become a doctor and specialize in neurology.

However, during the lockdown, he lacked means to access digital classess and online learning content. This is when he came to know of the support being provided by Lead implementing partner in the form of tablets. He registered for it and received the tablet at his home from the on-ground implementing NGO.

He used the tablet to attend online classess while also attending the NEET coaching classes. He thanks Dhwani Foundation for helping and supporting his endeavour during the tough times. Through his hardwork and support in the form of the tab, he has secured a seat at a reputed college and is now pursuing a medical degree.

Case story 2: From beneficiary to a change agent

Sanya (name changed) hails from Devanagere district. Her father is a farmer while her mother is a homemaker. Her younger brother is currently studying in class Xth. She was herself in class Xth when she availed the benefit of the tablets distributed under the project. She has a dream to get a decent job and support her family financially.

When Covid-19 had hit and the lockdown was put in place, she was left with no option but to sit back at home. There were certain online learning links that her teachers had suggested to go through but she did not have any means to access the same. This is when she got to know of the support from Dhwani Foundation and she applied for the same. The implementing NGO representative delivered the tab at her home and also provided a demo.

Since receiving the tablets, she has been able to easily access the online content on the tab. Further, since the offline classes have started, although she is attending the college regularly, she also makes it a point to come back and explore futher on the topics taught in the college. Moreover, she is also helping her brother with his subjects through the educational videos on YouTube. She has also been teaching 4 neighbourhood children from 4th, 5th and 6th standard and helping them with their Kannada and Mathematics classes. She has taught them through the digital content online and has helped them excel at their academics. She is also attending her college, while managing this and was of the opinion that this would not have been possible without the tablet support she received.





15. Project 12: Covid-19 Support to Chinmaya Mission Hospital



15.1.Background

The Covid-19 pandemic presented unprecedented challenges to public health and caused immense economic and social disruption across the world. In India, the Covid-19 pandemic began in early 2020 with the first case being reported on the 27th of January 2020 in Thrissur, Kerala¹⁰⁵. Thereafter, **the country saw two major waves of Covid-19** which overwhelmed not only the health system and medical infrastructure but the country in entirety. The pandemic also presented unique challenges in terms of the lack of available medical infrastructure to tackle the unprecedented number of patients in the hospital. The medical fraternity and hospitals felt strained during the peak of the second wave of the pandemic in the country. There was **shortage of medical infrastructure (especially oxygen and hospital beds) as the number of Covid-19 patients went up exponentially during the second wave**.¹⁰⁶

The Government of India took proactive steps to respond to the crisis and bolstered the preparedness of health system to respond to all aspects of Covid-19 management. The focus was to strengthen the medical infrastructure wherein due consideration was given on **strengthening the core capacities** of hospital infrastructure along with **development of indigenous capacities** of essentials like logistics including personal protective equipment, ventilators, oxygen generation plants, among others.¹⁰⁷ Amplifying the Government's efforts, **corporates and PSUs too came forward to support (in cash or in-kind) to hospitals** to upgrade the medical infrastructure. This was facilitated by the Ministry of Corporate Affairs, Government of India through a **clarification on 23rd March 2020 to accommodate any spending of CSR funds for Covid-19 as an eligible CSR activity.¹⁰⁸**

15.2. About the Project

To strengthen the Government's efforts towards combating Covid-19, the Infosys Foundation undertook various CSR projects. One of such projects was 'Covid – 19 Support to Chinmaya Mission Hospital' which was an emergency support provided by the Infosys Foundation to Chinmaya Mission Hospital (CMH) in Bengaluru during Covid-19 pandemic situation. The project included support on supplying specialised medical equipment to CMH during the pandemic to tackle surge of patients and further strengthen its efforts towards providing quality health services. A schematic representation of the project specifics is depicted below:



Figure 196: Schematic Representation of Project Specifics

This project catered support to **CMH** which was set up in 1969 in Indira Nagar, Bengaluru, India. CMH started with 50 beds and **gradually expanded to become a 200-bed multi-specialty hospital**. It has **120 visiting**



¹⁰⁵ Source: <u>https://www.who.int/india/nes/feature-stories/detail/responding-to-covid-19---learnings-from-kerala</u>

 ¹⁰⁶ Source:<u>https://www.thelancet.com/journals/lanmic/article/PIIS2666-5247(21)00123-3/fulltext</u>
 ¹⁰⁷ Source:<u>https://static.pib.gov.in/WriteReadData/specificdocs/documents/2021/dec/doc2021122421.pdf</u>

 ¹⁰⁸ Source: <u>https://www.mca.gov.in/Ministry/pdf/Covid_23032020.pdf</u>

consultants in 30 specialties and super-specialties, 15 In-house consultants besides Casualty and Duty Medical Officers.¹⁰⁹

Figure 197: Chinmaya Mission Hospital, Bengaluru





Infosys Foundation has long continued association with CMH to support them in strengthening their healthcare

capabilities and under this project, CMH was provided with various medical equipment/tools to specifically cater to the need of Covid-19 patients. Below table provides an overview of such medical equipment/tools procured for CMH during the project period¹¹⁰:

Table 26: Overview of Med	dical Equipment/ Tools	Provided Under the Project

Type of support	Quantity	Usage of medical equipment/ tool	Supply period
Ventilators for use in Adult ICU	12	A ventilator pumps air (usually with extra oxygen) into patients' airways when they are unable to breathe adequately on their own. People with severe Covid-19 symptoms required the support of ventilators during pandemic.	January 2020
Digital X-Ray Machine	1	It helped medical consultants to quickly read X-rays and provide adequate treatment to Covid-19 patients as compared to the conventional X-rays.	June 2020
Vehicle for staff transportation	1	Vehicle was used to transport, doctors, nurses, paramedical staff, and others during Covid-19 as the public transport services was seriously affected.	July 2020
ICU beds (high- end and ward beds)	21	These beds were incredibly important to provide immediate and lifesaving care to Covid-19 patients.	September 2020

¹⁰⁹ Source: <u>https://www.cmhblr.com/about-us</u>



¹¹⁰ Source: Project report received from Infosys Foundation

Type of support	Quantity	Usage of medical equipment/ tool	Supply period
Hand Sanitizers	-	The hand sanitizers were provided for the protection of patients and medical team during Covid-19 period.	2020
PPE Kits	24,000	These kits were provided for the protection of medical team at CMH to ensure the seamless treatment for Covid-19 patients.	2020
Oxygen Plant	1	One state of the art oxygen plant was provided under this project which can generate 500 liters of oxygen per minute. This played a vital role in addressing the shortage of oxygen supply which was resulting in deaths.	December 2021
Oxygen concentrators	10	These concentrators were useful for both Covid-19 and non-Covid-19 patients requiring oxygen support in the wards.	June 2021
CPAP machines	5	These machines were mainly used in Step-Down ICUs and wards which use mild air pressure to keep breathing airways open.	May 2021
Dialysis Machines	4	These machines were needed to treat patients suffering from Covid-19 related kidney failure.	June 2021

As informed by CMH Medical Director and Healthcare staff, all the above medical equipment/ tools were used for Covid-19 and non-Covid-19 patients during the project period. It is important to note that the equipment and tools are still being used by CMH for the purpose (usage) showed in above table.

15.3. Method of Impact Assessment

PW conducted the impact assessment study to evaluate the impact that have emerged since the project's implementation. The process began with a **kick-off meeting with the Infosys Foundation and CMH admin representative** to gain an understanding on the nature of support provided under the project and further align on any additional requirements for commencing the assessment. Following the meeting, PW team **received a project report** from Infosys team (as prepared by CMH) which consisted of the following information:

- Types of medical equipment provided under the project.
- Details on usage of the equipment including number of patients treated (year wise).

PW team **began the desk review** based on the project report received to design the assessment framework and finalise the key stakeholders for the interactions. In alignment with the Infosys team, the team worked on the development of a **structured qualitative methodology** for evaluating the project which included a desk review of the project report and qualitative methods for capturing stakeholder opinion and feedback.

Qualitative research methodology for the assessment was selected considering nature of the project which was in the form of an emergency response and individual beneficiaries during the project period (Covid-19 pandemic) could not be traced. Qualitative research methodology in such scenarios, can be useful in assessing and exploring the subjective experiences and provide in-depth information of the individual perspectives pertaining to the project. Moreover, this exercise intends to assess perspectives and perception of the different project stakeholders involved.





After development of the methodology, **key stakeholders were identified and tailored tools were prepared for each stakeholder** to guide the interactions with them. The evaluation framework of the study was as follows:

Figure 198: Qualitative Research Design for the Study



Once the stakeholders were identified and the research tools prepared an **on-site visit to CMH** was conducted on December 5th, 2023, to run tools with the respective stakeholders. **Total 8 interactions** were completed during the visit whereas **2 interactions** were completed virtually. These include:

- Three In-depth Interviews (IDIs) with Healthcare Staff at CMH
- One IDI with Medical Director and two IDIs with CMH Admin Representatives i.e., Bio-Chemical Engineer and Hospital Administrator
- Three IDIs with current patients (Due to the data confidentiality, patients' data was not requested from the CMH as a practice. However, team was able to interact with a few patients during our visit to CMH to understand the impact on their lives.)
- One IDI with the Project team of the Infosys Foundation

Responses were then analysed along with corroboration with secondary/desk research findings (on assorted topics to understand impact and challenges of Covid-19) to arrive at detailed findings as depicted in the next section on 'Analysis & Findings'.

15.4. Analysis & Findings

Based on our interactions with project stakeholders along with desk review of the project report provided by Infosys Foundation, research team has summarised the below findings from study:

15.4.1. Challenges Before the Project

Covid-19 pandemic presented various challenges to the healthcare systems demanding unprecedented levels of resilience, adaptability, and collaborative efforts. This situation was no different for CMH and healthcare staff and admin representatives informed that:

- Hospital was facing challenges in terms of inadequate healthcare equipment (such as ICU beds and ventilators), increased Covid-19 positive cases and shortage of healthcare staff to treat Covid-19 patients. Amidst the surge in admission of patients at CMH the healthcare workers were facing challenge of limited availability of beds.
- Besides, there was a need to ensure adequate supply of PPE (Personal Protective Equipment) kits for frontline workers at CMH during the pandemic. The prices for PPE kits increased considerably (from INR 200-250 per kit to INR 2,000 per kit) which further posed financial challenges before CMH.
- During the interactions, one of the CMH healthcare staff informed that Covid-19 disrupted public transportation services which restricted healthcare staff's ability to reach on time and treat the patients effectively and timely (especially during emergencies and beyond working hours).





 In Bengaluru, State Government had also made mandatory the provision of an oxygen plant in all hospitals, as there was shortage of oxygen supply resulting into increased patients' mortality. Hence, it became important for CMH to set-up an oxygen plant while simultaneously managing the requirements of other medical equipment and tools to treat Covid-19 patients.

15.4.2. Summary of the Impact Created

CMH identified this need at the time of pandemic and **ensured preparedness for the unforeseen health care challenges** with support from Infosys Foundation. Below section provides an overview of impact created by the project on the lives of different project stakeholders during project period: **Figure 199: High end ICU**

1. Meeting the Surge of In-patients' Admissions during Covid-19: As per our interactions with the admin staff of CMH, six high-end ICU beds and 15 ward beds were provided by Infosys Foundation which helped the hospital in meeting the escalating needs of patients seeking healthcare services during the pandemic. Further, through these beds CMH ensured that no patient was left without care required by them during the pandemic. These beds were initially allocated for Covid-19 patients but are still being used to serve regular patients as well. The beds were supplied in September 2020 and till March 2023, a total of 2,640 patients had benefitted from these beds. Out of these, 1,277 patients benefitted during FY 2021 and 2022, during the peak years of the pandemic as reflected in the below Figure¹¹¹:



Figure 200: No. of Patients Served Using the Beds Provided as Part of the Project at CMH



Kindly note that FY 2020-21 data is from October 2020 only.



¹¹¹ Source: Project report received from Infosys Foundation



2. Enhanced Diagnostic and Recovery Capabilities through Improved Medical Equipment: It was noted that total 12 ventilators were provided by Infosys Foundation. These were allocated in the adult intensive care unit (ICU) to cater to respiratory needs of both Covid-19 and non-Covid-19 patients. From January 2020 to June 2023, this critical lifesaving device played a vital role in providing ventilatory support to 279 patients. This includes 136 patients, who received ventilatory support during FY 2021 and 2022 (peak of the pandemic) as reflected in the below Figure¹¹²:

Figure 201: No. of Patients Received Ventilatory Support under this Project



Kindly note that FY 2019-20 data is from January 2020 and FY 2023-24 data is till June 2023 only.

Adequate deployment of ventilators positively enhanced the hospital's capabilities to provide advanced respiratory care during the pandemic. Beyond the numerical count of patients who received ventilatory support there has been an enhancement in healthcare efficacy in diverse ways as reflected below:



"During the second wave of the Covid-19 pandemic the overall mortality rate among the patients at CMH stayed below 10%. This may not have been possible without the support received from the Infosys Foundation in terms of equipment, emergency vehicles and protective assets for the healthcare workers and staff at the time of pandemic."

- As narrated by Medical Director at CMH during our interactions



¹¹² Source: Project report received from Infosys Foundation



3. On-time Diagnosis and Treatment: Digital X-ray machine provided by Infosys Foundation to CMH during Covid-19 pandemic enhanced the hospital's diagnostic capabilities as it has been helpful in presenting doctors and consultants with advanced tools to generate instant results. Deployment of digital X-ray machine has contributed to timesaving during the overall diagnostic process, thereby increasing effectiveness of the treatment and provide doctors and consultants with precious extra time to administer treatment. This machine is being used even after Covid-19 period to further address health problems of the patients. Till May 2023, more than 54,000 patients' X-rays were taken for examination wherein more than 25,000 patients' X-rays specifically taken during the period coinciding with the peak of Covid-19 cases from FY 2020 and 2021 as reflected in below Figure:





Kindly note that FY 2020-21 data is from June 2020. FY 2023-24 data is till June 2023 only.

In addition to the digital X-ray, a **dialysis machine** provided by Infosys Foundation has also helped **8,151** patients to undergo the dialysis process from June 2021 to June 2023. This was especially helpful for those patients who had specific needs of dialysis support while also helping a set number of patients who were diagnosed with comorbidities requiring dialysis during Covid-19.

Figure 203: Digital X-ray machine



Figure 205: Ventilator Machine











Below graph provides an overview of the number of dialysis performed using dialysis machines provided under this project¹¹³:



Figure 206: No of Dialysis Performed Through the Dialysis Machines Provided under the Project

Kindly note that FY 2021-22 data is from June 2021. FY 2023-24 data is till June 2023 only.

- 4. Addressing the Shortage of Protective Utilities: Basis the interactions with healthcare staff at CMH, team noted that due to the collaborative effort of the Infosys Foundation and CMH there was timely availability of PPE kits, masks, and sanitizers during the pandemic period, especially when the market prices of these items were high, and shortage was rampant. These protective gears functioned as a shield for frontline healthcare workers and enabled them to provide effective treatment to Covid-19 positive patients. As per interactions with hospital staff and healthcare workers, it was noted that:
 - a. PPE kits provided by Infosys Foundation were of high-quality material and met the mandated standards suggested by the Government (including healthcare professionals). Thickness of PPE kits ranged from 85-90 GMS ensuring durability and providing a reliable barrier against potential exposure to the infection. This ensured safety for all the healthcare staff including doctors.
 - b. These kits were comfortable, fit and breathable which allowed healthcare workers to perform their duties comfortably for extended periods without compromising safety. The use of these PPE kits, masks and sanitizers played a key role in preventing further spread of virus. All the doctors and the healthcare workers in the hospital were unharmed due to the timely supply of these protective utilities. There was only one unfortunate death of a healthcare worker at the hospital due to Covid-19.
 - c. One of the healthcare staff members shared that during the peak of the Covid-19 pandemic, CMH was using approximately PPE kits at a rate of ~120 kits per day. At this crucial time, Infosys Foundation provided a substantial supply of 24,000 PPE kits which proved to be crucial. This support was also provided at a time when the market price of PPE kits was high due to the limited supply thereby reducing the financial burden of CMH to some extent. On a monthly basis, CMH received and distributed approximately 3,000 PPE kits. This consistent supply ensured that the healthcare workers on duty had access to sufficient protective gear. Support from Infosys Foundation spanned over 8 months covering a substantial duration of the pandemic.

"At the time of Covid-19 pandemic when the prices of essential protective items like PPE kits and masks were high, the support from Infosys Foundation ensured that the healthcare workers had access to these necessities without compromising on the quality. It ensured the safety of all the healthcare workers in the hospital during the critical times."

As narrated by a Healthcare worker at CMH during our interactions



¹¹³ Source: Project report received from Infosys Foundation



5. Operational Support and Logistical Efficiency: A

dedicated vehicle was also provided in July 2020 to CMH to mitigate logistical challenges faced by hospital's medical staff during the Covid-19 period. This ensured seamless mobility for doctors, nurses, and paramedical staff, especially during the time when public transport services were severely affected. The vehicle is in use even after the Covid-19 period to ensure timely transportation of surgeons, consultants and anaesthetics for emergency purposes and surgeries especially during night and is used for making 3-4 trips daily on an average. The vehicle has been used to address the logistical needs for healthcare for more than 2.700 cases during the year 2020- 2022. Before this support, CMH did not have such common facility for staff transport and if this support was not there, staff would have completely relied on limited public conveyance leading to increased exposure of the Covid-19 infection. The running and maintenance cost of the vehicle is borne by CMH.

Figure 207: Vehicle for staff transport



6. **Increased Accessibility and Availability of Quality Healthcare:** While interacting with current patients, it was noted that before seeking medical care at CMH, they had consulted other private healthcare institutions for their treatment. However, despite having all facilities in place those hospitals charged a high fee from the patients as compared to CMH where treatment is provided with **equally high-quality facilities but at a comparatively affordable price**.

"I visited multiple hospitals across Bengaluru for my routine treatment but considering the quality of equipment and services provided by CMH it has proven to be value for money. It provides services through high quality equipment at an affordable price as compared to other private healthcare institutions nearby."

As narrated by a patient at CMH during our interactions

7. Enhanced Operational Capabilities to Provide Quality Treatment for Respiratory Distress: As informed by the CMH admin representatives the hospital had measures in place for oxygen management even before the support from Infosys Foundation. For example, liquid oxygen was stored in three types of cylinders (A, B, and C) with capacities of 5 liters, 10 liters and 42 liters for patient care. However, Covid-19 pandemic imposed the need to have enhanced oxygen generation and management capabilities to cater the surge in patients coming with respiratory distress. In this regard, the support from Infosys Foundation in the form of Continious Positive Airway Pressure (CPAP) machines, Oxygen concentrators and Oxygen plant was helpful as mentioned by Medical Director. Deployment of these equipment enhanced hospital's operational capabalities in terms of management and treatment of Covid-19 patients particulary those experiencing respiratory distress.

During the interactions, it was shared that **five CPAP machines** were provided by Infosys in 2020. These machines are primarily **used in step-down ICU wards for both Covid-19 and non-Covid-19 patients**. All members of **nursing staff at that point were trained through specialized training sessions on usage of these machines**. These sessions **comprised of a mix of both on-site training and virtual training**. Further, contact details of specialised trainers were provided to the staff in case any machine related issue arises. These machines have benefitted total **919 patients** till now (June 2023). It has **effectively prevented the need for invasive mechanical ventilation for patients** not only minimizing the risks of complications but also helping ease the burden on critical care resources.

Covid-19 infection negatively affected the lungs of the infected patients often leading to severe pneumonia. Hence, support from Infosys Foundation in the form of a combination of Digital X-Rays, Ventilators and the CPAP machines was strategic for rapid detection and mitigation of any negative imapct on the patient's lungs.





Below figure provides broad overview of number of patients benefitted with CPAP machines¹¹⁴:



Figure 208: No. of Patients Benefitted by CPAP Machines Provided under this Project

Kindly note that FY 2020-21 data is from June 2020. FY 2023-24 data is till June 2023 only.

As mentioned earlier, there were challenges pertaining to adequacy of oxygen to various wards and patients which required immediate attention. CMH had 18 oxygen concentrators in place already. However, considering the surge in the number of patients, demand often exceeded the available resources and it was felt that additional number of concetrators would be required to meet the demand. This is where the support from Infosys in the form of ten oxygen concentrators in the year 2021 proved vital. These oxygen concentrators addressed the oxygen needs of Covid-19 patients in the wards. On an average, 15-20 Covid-19 positive patients have benefited from the availability of these oxygen concentrators. The oxygen concentrators are being used even after the Covid-19 period for patients with conditions like COPD and respiratory failure etc.

Figure 209: Oxygen Concentrators (L & M) and CPAP Machine (R) Provided by Infosys Foundation





¹¹⁴ Source: Project report received from Infosys Foundation



had mandated installation of oxygen plants in all hopitals in Bengaluru as there was a shortage of oxygen supply which lead to high mortality rates among the patients. This oxygen plant, therefore, has been extremely important for the hospital.

Prior to installation of oxygen plant there were oxygen cylinders of various capacities assigned for different units in the hospital. Since the installation of plant there has been an uninterrupted and reliable supply of oxygen to the operation theatres, adult ICU, step down ICU and paediatric wards through piped connections.

The hospital management shared that having an oxygen plant at the premises ensured consistent and reliable oxygen suppy across multiple healthcare units. In year 2022, a total of **3.26 lakh liters** of oxygen was consumed by the patients through the oxygen plant whereas in year 2023, total 1.91 lakh liters have been consumed till June, 2023 contributing to enhanced patient care and medical services throughout the hospital. Figure 210: Oxygen Plant Setup Under the Support from Infosys Foundation



8. Overall Impact on Operational Efficiency of the Hospital: While interacting with healthcare workers, it was noted that the adequate availability of the equipment, emergency vehicle and a fully operational oxygen plant at CMH ensured the effective delivery of essential healthcare services. Due to this support, healthcare workers felt more efficient in managing Covid-19 cases. The hospital staff optimized their operations, leading to a streamlined treatment process for patients.

With a primary focus on the overarching aim to save lives **CMH prioritized availability and accessibility** of critical resources. This commitment was reflected not only through the deployment of advanced medical equipment but also in the provision of dedicated emergency vehicle and oxygen plant. The hospital management system was able to provide the patients with single line billing with no additional charge of numerous services. This ensured that patients could get timely live saving treatment without the hospital having an additional financial burden to procure medical equipment.

"During Covid-19 pandemic, we faced hurdles in supplying adequate oxygen to the patients. We had 18 Oxygen concentrators, but most of the times, demand exceeded the available resources during pandemic. Oxygen plant and oxygen concentrators supported by Infosys Foundation have helped in effectively tackling the oxygen supply challenges. This plant generates 500 litres of oxygen per minute which has increased our capacity to cater to a higher number of patients."

As narrated by an administrative staff at CMH during our interactions

15.4.3. IRECS Analysis

Based on interactions with key stakeholders and desk review of the project report, **impact of the project has** also been assessed on the IRECS (Inclusiveness, Relevance, Effectiveness, Convergence, Sustainability) framework parameters. The IRECS analysis summary has been presented in below table:

Table 27: IRECS Analysis





Parameter	Assessment from Study
Inclusiveness	 As per our interactions with the project stakeholders timely support from Infosys Foundation during pandemic ensured availability of sufficient resources. CMH is a missionary hospital serving all sections of the society to cater to their need of affordable and quality healthcare services and this support from Infosys bolstered the efforts of CMH to cater every patient (irrespective of their age, gender, social category) coming in for treatment during Covid-19. It was also noted that CMH was following the Government guidelines for billing the patients at the prescribed rates only. This is also in line with vision and mission of the hospital to provide quality healthcare at affordable rates. In this regard, the support from Infosys Foundation ensured that hospital continues to cater to all classes of people as well, including patients from
	economically weaker sections of the society.
Relevance	• During Covid-19 pandemic, healthcare infrastructure across the country was stressed with a sudden surge in the number of patients. A high proportion of infected patients also had to be put on ventilators due to associated complications. Further, there was need to provide beds to patients who had to be hospitalized along with measures to safeguard the hospital staff from the infections. The support from Infosys Foundation in form of ventilators and specialized beds was relevant to the emerging situation at that point in time.
	 Covid-19 negatively affects lung health¹¹⁵ of the infected patient by damaging the linings and walls of the air sacs, often leading to severe pneumonia. Therefore, it is essential to detect and mitigate these effects at an early stage of infection. Support from Infosys Foundation in form of X-ray machines, CPAP machines and ventilators to CMH served this very purpose ensuring the rapid detection of infection to lungs and further mitigating its effects.
	 Another challenge, especially during the second wave of the pandemic was the limited availability of oxygen in the hospitals for the Covid-19 infected patients with respiratory complications. Infosys Foundation, at such time, came forward and addressed the pertinent need by supplying oxygen concentrators and setting up an oxygen plant at CMH.
Effectiveness	• The provision of high-end ICU beds and general ward beds from Infosys Foundation helped the hospital cater to all the patients who came to the hospital for treatment (Covid-19 or otherwise). As per the project report as well as the interactions with the hospital management more than 2,500 patients have benefited from these beds till July 2023.
	• The pandemic came with severe health complications, especially respiratory complications. At such times, CPAP machines, oxygen concentrators and ventilators were of immense help to the patients. As per interactions with the hospital staff about 300 critical patients have been put on ventilator support utilizing 12 ventilators provided by Infosys Foundation, while more than 900 patients have been benefited by CPAP machines. Further, oxygen plant setup by Infosys Foundation has been able to supply more than five lakh liters of oxygen to patients. The dialysis machines too have been able to help perform dialysis on more than 8000 patients while 54,000+ X-Rays have been performed on digital X-Ray machines.
	 As per interaction with the Medical Director, mortality rate at the CMH during the second wave of Covid-19 was less than 10%. A major part of this, as per Medical Director could be attributed to the support in form of high-end equipment from Infosys Foundation.
	 The support from Infosys Foundation in form of PPE Kits and hand sanitizers ensured that the healthcare staff at the hospital was adequately protected

¹¹⁵ Source: <u>https://www.hopkinsmedicine.org/health/conditions-and-diseases/coronavirus/what-coronavirus-does-to-the-lungs</u>



Parameter	Assessment from Study
	during the pandemic. This, as per interaction with the hospital administration, resulted in low casualties from amongst the hospital staff as well (1 casualty could reportedly be attributed to Covid-19 from amongst the hospital staff at CMH). Also, PPE kits from Infosys Foundation ensured that there was considerable reduction in hospital's financial burden in procuring these items, and financial resources could be deployed in providing other crucial services during the pandemic.
Convergence	• The support from the Infosys Foundation to the hospital was in alignment with demand created during the Covid-19. There were concerted efforts from the Government to improve health infrastructure across the country owing to an increased demand. The support under this project, therefore, was in alignment with efforts of the Government along with efforts from other private companies as well towards stepping up the medical infrastructure of the country.
Sustainability	 The support from the Infosys Foundation, though provided with the primary purpose of serving those with Covid-19 complications has since evolved to be useful for non-Covid-19 patients as well. All the equipment supplied including ICU beds, CPAP machines, oxygen concentrators, et cetera. continue to be in good conditions and are used extensively even today, as informed by the healthcare staff. The hospital has since taken up independent maintenance which ensures usability and durability of such equipment and tools.
	A few key examples of continued usage of the equipment are:
	 Number of X-rays taken through the digital X-ray machine in the first six months 2023 (not a peak Covid-19 year) alone is 11,930 demonstrating the fact that the machine is still relevant and useful today.
	- Similarly, the ventilators have been used to provide support to 62 patients in the first six months of 2023.
	 Ten oxygen concentrators provided by Infosys continue to be used even after the peak of the pandemic has passed for patients with COPD or other respiratory disorders.
	• Vehicle provided by Infosys Foundation for staff transport during Covid-19 pandemic is still being used for transport of consultants during emergency surgeries and deliveries. On an average, the vehicle is still making 3-4 trips a day.

15.5.Alignment to the Infosys Limited's CSR policy, and the UN SDGs

The project also **aligned with Infosys Limited's CSR policy**, which mentions **healthcare as one of the CSR focus areas** for Infosys Limited. The project is also aligned with Sustainable Development Goal¹¹⁶: **SDG 3 "Good health and Well-being" and SDG 17 "Partnership for the Goals".** SDG-3 emphasizes on **ensuring health life and promoting well-being for all at all the ages**, with a **specific focus on strengthening healthcare systems**.



Similarly, SDG-17 focusses on strengthening the means of implementation and revitalize the global partnership for sustainable development. By addressing the pressing healthcare challenges posed by the COVID-19 pandemic through a collaborative partnership, this project has contributed to the overarching goal of good health and well-being.



¹¹⁶ Source: <u>https://sdgs.un.org/goals</u>

15.6.Study Limitation

• Limited Availability of Patients: There was a challenge in finding and interacting with individuals (patients) who directly benefitted from Infosys's support at Chinmaya Mission Hospital during Covid-19 period which slightly restricted the study's ability to gather first hand narratives from patients about impact of support they received. Due to confidentiality, patients' data was not asked from CMH and hence the team tried to meet and interact with the patients (who were availing the services) on the day of visit. Besides, patients at hospital were undergoing treatments and medical examinations and were in a state where their primary attention was rightfully dedicated towards the ongoing treatment process. As a result of this, the time given for in depth discussion was limited restricting their capacity for prolonged discussions.

15.7.Case Stories

Following case stories have been gathered during the discussions held with CMH team:

Case story 1: Renewed Strength – Speedy Recovery of a 60-year-Old Lady

During Covid-19 pandemic, CMH came across the case of a 60-year-old lady who was previously healthy and active but had experienced **an acute respiratory distress** leading her family to seek urgent medical care. **Her family faced considerable difficulties** in securing a hospital bed in Bengaluru. Hence, her family was worried about whether they would be able to get the lady treated at CMH. Upon admission, it was revealed that 80% of her lungs were already affected.

CMH's pulmonology and critical care units collaboratively conducted her treatment. **She was on ventilator** support for almost two weeks, followed by an additional week on (NIV) non-invasive ventilation. Subsequently, she was shifted to the ward for a week before achieving a complete recovery.

Upon revisiting CMH for her routine checkup, lady expressed her profound gratitude to the doctors of the hospital. Availability of beds and ventilators played a crucial role during a time when many lives were at stake.

This case stands as a testament to CMH's and Infosys Foundation's commitment to providing effective and timely care during the challenging circumstances of Covid-19 pandemic.

Case story 2: Resilience Triumphs – Journey to Recovery of a 75-year-Old Man

This is the case of an elderly gentleman aged over 75 with a pre-existing history of diabetes and underlying heart issues. At the time of Covid-19 pandemic he visited Chinmaya Mission Hospital for the treatment. He was facing difficulty in breathing indicating a critical condition as informed by CMH doctors. His oxygen saturation was down to 60% which required immediate medical attention.

Recognizing the severity of the situation, the medical team at CMH administered a non-invasive ventilator (NIV) with oxygen. The patient was **tested positive for Covid-19**, and his **heart issues were worsened due to the concurrent cardiac ailments** prevalent during that period. His **critical condition necessitated an unusually high oxygen requirement of 12-15 liters**, posing a risk of heart attacks. At this juncture, **having an oxygen plant was instrumental in providing the required respiratory support to the patients**.

Over the next 4-5 days, **the cardiac team at CMH along with pulmonologists**, **addressed the cardiac issues**. There were various other challenges during the treatment period as the patient being deaf required communication through written messages.

After 5-6 days, he started showing improvement and then after spending **8-10 days on the ventilator** the patient was shifted to NIV support for a week. After, about 2-3 months of treatment, he was discharged from the hospital with complete recovery.



16. Project 13: Holistic Village Development by Community Participation

16.1.Background

Madhya Pradesh is an agrarian economy, with over 70% of its rural population dependent on it for livelihood and sustenance. The demography of the various districts in the state is predominantly tribal (especially in rural regions). With limited growth in agricultural development over the years, communities in Jhabua and Alirajpur districts face challenges across various human development sectors. These districts are endowed with natural resources wherein various tribal groups such as Bhil community etc. uphold their beliefs of nature preservation and community participation in their daily lives. Hence, it becomes necessary to undertake interventions to uplift the Bhil community in these two districts which require special attention on their rich culture, traditions, past struggles, and sentiments towards nature.

16.2. About the Project

Infosys Foundation has been undertaking several CSR projects to support efforts in the realm of community and sustainable livelihoods development. One such project is on 'Holistic Village Development by Community Participation' implemented by Shivganga Samagra Gramvikas Parishad (Shivganga). This project aims to solve community issues and attain sustainable village development of over 1,300 tribal villages in Jhabua and Alirajpur districts of Madhya Pradesh. This project was a part of an established partnership between Shivganga and Infosys Foundation since 2010 and since then, it has benefitted 36,356 community members.

A schematic representation of the project specifics is depicted below:



Figure 211: Schematic Representation of Project Specifics

Below table depicts the project activities undertaken during the FY 2021-22 (assessment year):

Table 28: Project Reach across the Different Activities (2021-2022)¹¹⁷

Activities	Sub-activities	Total beneficiaries (Jhabua)	Total beneficiaries (Alirajpur)	Total Project Beneficiaries
Youth	Camps	754	200	954
Empowerment & Skill Development	Exposure Trainings	200	754	954
Development	Gram Engineering Training	300	200	500



¹¹⁷ Source: Project information shared by Shivganga



Activities	Sub-activities	Total beneficiaries (Jhabua)	Total beneficiaries (Alirajpur)	Total Project Beneficiaries
	Basic Bamboo Handicrafts Training	600	-	600
	Advanced Bamboo Handicrafts Training	80	-	80
	Bamboo Workshop Toolkits	NA	NA	NA
	Dharampuri Training Centre Infrastructure Development	NA^	NA^	NA^
Women Empowerment	Women Empowerment Training	793	-	793
	Family Grove Training	1,000	-	1,000
Land Enrichment	Organic Farming Training	283	-	283
Water Conservation	Annual Halma Event and Construction of Ponds, Stop Dams (Water conservation initiatives)	NA^	NA^	NA^
	Sacred Groves Revival Program	NA^	NA^	NA^
Community Development	Fellowships	6	-	6
Grand total		4,016	1,154	5,170

NA- not applicable as only 50 toolkits were installed

NA^- not available as these are community centric activities. These initiatives have benefited all community members from a village and its nearby vicinity, hence direct count of the beneficiaries is not available with the implementing partner.

16.3. About the Implementing Partner

In **2007**, Shivganga began its journey as voluntary Not-for-Profit organisation. It aims to foster holistic rural development by cultivating a mass movement of change led by the community¹¹⁸. Their development model builds the strengths of the community, drawing inspiration from the concept of "**Parmarth**" i.e., sharing the pain of others without expectations. Shivganga ensures sustainable community participation; some examples of the same would be "**Matavan**" and "Halma", which are being undertaken by community members¹¹⁹.

16.4. Method of Impact Assessment

The impact assessment study leveraged **an integrated and cohesive approach** to assess the social impact of Infosys Foundation's CSR project implemented by Shivganga. A **kick-off meeting was held with Infosys**



¹¹⁸ Source: <u>https://shivgangajhabua.org/aboutshivganga</u>

¹¹⁹ Source: <u>https://shivgangajhabua.org/tribal_culture</u>



Foundation to understand project activities in detail. Following the meeting, PW received following **project documents** from Infosys Foundation and Shivganga, including:

- Memorandum of Understanding (MoU) between Infosys Foundation and Shivganga
- Project Report (2021-22) chalking out different project activities and its progress over a period of time.
- Project Completion Certificate (2021-22) giving a landscape on utilisation against the activities.
- Beneficiary list of the engagement providing an overview on number of beneficiaries in FY 2021-22

PW team then leveraged the received project documents for **desk review** to understand the project's progress during the assessment period. Consequently, the team **mapped project stakeholders** for data collection for both quantitative and qualitative research methods.

In consultation with Infosys Foundation, **mixed methodology** (quantitative and qualitative research methodologies) was deployed to undertake the impact assessment study. The quantitative study focused on generating insights and evidence related to the current and expected impact. The qualitative data was leveraged to translate observations, perspectives, and experiences into valuable understandings of the actual impact. In addition to the quantitative research techniques such as surveys, qualitative research methods like Focus Group Discussions (FGDs) and In-depth Interviews (IDIs) were also deployed.

An **assessment framework** was then developed for the impact study, following which the PW team identified the key stakeholders, and sample for data collection. Team noted that this project has benefitted **4,010 individuals (youth/ artisans) across the different activities** which constitutes ~78% of the total project reach during FY 2021-2022. Since, Jhabua district had catered to all project activities, team considered 4,016 as the project universe to draw the sample size of 256. The overall sample size was calculated leveraging **90% confidence interval and 5% margin of error**, it was further split proportionally across activities.

Below table provides an overview of stakeholders mapped and interacted under quantitative and qualitative survey:

Table 29: Stakeholders for Qualitative Interactions and Quantitative Survey

Project Sub-activities	Quantitative Sample		Qualitative Sample	
	Sample covered	Stakeholders	Sample covered	Stakeholders
Camps	48	Trainees	1 IDI	Trainer
			1 FGD	Trainees
Exposure Trainings	13	Trainees	1 IDI	Trainer
			1 FGD	Trainees
Gram Engineering Training	19	Trainees	1 IDI	Trainer
			1 FGD	Trainees
			1 IDI	Village Leader
Basic Bamboo Handicrafts	38	Trainees	1 IDI	Trainer
Training			1 FGD	Trainees
	5	Trainees	1 IDI	Trainer



Project Sub-activities	Quantitative Sample		Qualitative Sample	
	Sample covered	Stakeholders	Sample covered	Stakeholders
Advanced Bamboo Handicrafts Training			1 FGD	Trainees
Bamboo Workshop Toolkits	NA	NA	1 IDI	Trainer
			1 FGD	Trainees
Dharampuri Training Centre Infrastructure Development	NA	NA	1 IDI	Admin Staff
			1 IDI	Trainer
			1 FGD	Trainees
Women Empowerment Training	51	Trainees	1 IDI	Trainer
			1 FGD	Trainees
			1 IDI	Woman Leader
Family Grove Training	64	Trainees	1 FGD	Trainees
Organic Farmic Training	18	Trainees	1 IDI	Trainer
			1 FGD	Trainees
Annual Halma Event and Construction of Ponds, Stop Dams (Water conservation initiatives)	NA	NA	1 FGD	Community Members
Sacred Groves Revival Program	NA	NA	1 FGD	Community Members
			1 IDI	Village Leader
Fellowships	NA	NA	1 IDI	Fellow
			1 FGD	Beneficiaries
Total	256		27	





sample involved interactions with ~144 stakeholders to understand the holistic perspective of this project. Team also ensured the appropriate representation across villages during the quantitative and qualitative interactions. The sample chosen was from villages of high reach in Jhabua district. These locations were finalised in alignment with the implementing partner, to ensure availability and ease of mobility of stakeholders in the data collection process.

16.5. Analysis & findings

16.5.1. Challenges before the Project



Basis the discussions with Shivganga team, it was identified that the district and community faced following challenges:

- Lack of awareness and skills to explore alternate means of income: High unemployment rates, low literacy rates and lack of opportunities continued to challenge the youth. This created heavy dependency on agriculture and daily-wage labour work as the sole avenues for income generation.
- **Cultural disconnect:** The Bhil tribe have a rich cultural heritage with community participation, connection with nature and its preservation at its core. However, challenges such as migration in search of livelihood, deforestation, and loss of habitat led to dilution of social and cultural diversity for the community.
- Gap in identification of community/ village-level issues: Dependency on government-led solutions, lack of leadership and participatory spirit among communities, gave rise to villages functioning in silos. There was notable lack of leadership within villages and platforms for individuals to come together to discuss common concerns such as water shortage, revival of forests or need for awareness of knowledge on land rights, forest rights, etc.

16.5.2. Summary of the Impact Created

Below are the key findings:

A. Profile of the Respondents

This section presents the socio-demographic conditions of 256 respondents:

- Out of the total respondents (n=256), 54% were men and 46% were women (Figure 213).
- The age of the respondents spans from under 20 years to over 40 years with highest number of respondents (39%) falling in the age category of 'less than 20 years' (Figure 213).

Figure 212: Gender and age wise distribution of respondents (n=256)





<20 years 21-30 years 31-40 years >40 years



- **29%** (n=256) respondents shared that they have received **no formal education** whereas only 6% respondents (n=256) have completed graduation. It indicates that this project was designed to address community with varying educational backgrounds and not restricted to any educational level (Figure 214).
- A significant 48% of the respondents (n=256) are primarily involved in agricultural activities whereas 5% work as agricultural labour. It highlights the dependence on agriculture and the predominantly agrarian nature of the community. 19% 0% 10 beneficiaries (n=256) were students who have been associated with youth empowerment and skill development activities.

Figure 213: Education wise distribution of respondents (n=256)



Figure 214: Occupation-wise Distribution of Respondents (n=256)



B. Youth Empowerment & Skill Development

This section describes the impact created by various project activities such as camps, exposure visits, gram engineering trainings for youth, bamboo handicrafts trainings etc., on the lives of project stakeholders.

1. Youth Empowerment: Camps (n=48)

Four-day Youth Empowerment Camps (or **Vananchal Sashktikaran Varg**) were organised for motivating tribal youth with an objective to empower their community. It was analysed that:

- During 2021-22, 31.3% respondents had attended more than 5 training sessions (Figure 216).
- **100%** respondents would recommend this training to other youth in the future.
- **85.4%** respondents expressed **satisfaction with the training**. Respondents stated that training curriculum had proven to be effective in uniting them with their cultural heritage. In few cases, respondents they needed more time to attend the training and understand the contents.
- It was noted that these camps helped channelize the untapped potential of the local youth

Figure 215: Trainings attended (n=48)



• 1 • 2 • 3 • 4 • 5 or more

May 2024 204





towards community development and enabling them to be community leaders while being in touch with their tribal cultural heritage. Further, it instilled in them a **sense of self-esteem and purpose**, through inspiring stories of tribal leaders, and freedom fighters.

• **60.4%** respondents suggested that the project has been **instrumental in helping them find their lost sense of pride** in tribal culture. Respondents (52.1%) also stated that with the interventions, they themselves felt responsible for their actions towards the larger community (Figure 217).



Figure 216: Impact of Youth Empowerment Camps (n=48)

Multiple choice question, hence total will not add up to 100%

2. Youth Empowerment: Exposure Training (n=13)

Exposure trainings were organised to enhance capabilities of the youth, and broaden their horizons with technical understanding on a multitude subject such as water conservation, afforestation, solar energy etc. Under this, select few individuals were also taken for site visits to neighbouring villages, police stations, etc., to help provide them working knowledge of government institutions. Our analysis indicates that:

- **100%** respondents were **satisfied** as it empowered youths to emerge as change agents in their villages and increased their knowledge through exposure visits.
- 69.2% respondents stated that they learnt water conservation and afforestation, and agriculture related materials, followed by 61.5% stating that they learnt animal husbandry. Critical issues such as water scarcity, migration pressures, heavy debt burdens, healthcare access, and exploitation by local authorities were covered.
- 92.3% respondents believed in engaging in a livelihood generation activity. Respondents also stated an increase of approximately 10-20% in their monthly incomes.
- Exposure visits were also held at neighbouring villages (spanning over 3 to 5 days) to understand their functioning, management and best practices around conflict resolution, agricultural practices, community building etc. This aspect has received mix responses from respondents as
 - 15.4% respondents reported to have taken an exposure visit to the police department whereas 30.8% reported to visit to the judiciary courts.
 - While 7.7% confirmed visiting to other villages, **46.2% did not undertake any exposure visits**.
- Team also probed the respondents who attended such visits (n=7 i.e., 53.8% of 13) to understand their learning experience. They reported that they learnt how to make use of government systems to their benefit (42.9%) followed by rest of respondents highlighting following aspects:





Gained knowledge on the role of different government institutions

Understood the roles of different individuals within government

institutions

During interactions, it was also noted that often due to lack of time, the information was inadequate and lacked depth of details. However, any such visit for the members was an exhilarating and exciting experience where they were provided an opportunity to travel and experience outside the boundaries of their village.

3. Youth Empowerment: Gram Engineering Training (n=19)

This activity empowered village youths to gain basic engineering skills through a four-day training program. It included sessions on varied techniques of water conservation and afforestation such as contour trenching, earthen dams, check dams, bunds, etc. The sessions are held at Dharampuri training campus¹²⁰ (supported by Infosys Foundation) in partnership with SGSITS Engineering College in Indore, Madhya Pradesh by domain expert faculty. Basis the interactions with respondents, it was analysed that:

- 100% respondents agreed that the training was effective. Maximum training was imparted on earthen dam (85%), bunds (65%), and check-dam (55%).
- Respondents also stated that they could apply knowledge in the villages (95%). It also provided an opportunity to reach out to other community members (50%). (Figure 218).



Figure 217: Impact of Gram Engineering Training (n=19)

Multiple choice question, hence total will not add up to 100%

Respondents stated that they were able to use their knowledge successfully in:

- preparing and presenting the water conservation plan¹²¹ to village leaders and the community (75%)
- providing solutions to village leaders and the community besides the water conservation plan (55%)
- working with village leaders on activities related to water conservation (35%)

Respondents also highlighted that there were certain areas of improvement as mentioned below:

¹²⁰ This 5-acre campus near the district headquarters of Jhabua has become a place of learning for villagers. With growing need, this training institution has been developed to capacitate nearly 300 or more trainees for a residential training at a given point in time. ¹²¹ Trainees learned to make water conservation plans as a part of the training which were leveraged for the purpose of making ponds, dams, etc.in villages.



- Beneficiaries indicated the limited availability of time to attend four-day sessions as they are predominantly agricultural/ daily wage labourers and hence, suggested to **reduce session time**, if possible.
- Beneficiaries stated that the effectiveness of teaching methods can be improved by adding more realworld examples instead of theoretical sessions.
- Additionally, **women were not offered the opportunity** to take participation owing to low expected participation, which led to more male centric leadership in the realm of technical expertise.
- 4. Skill Development: Basic Bamboo Handicrafts Training (n=38)

To harness the potential of the youth and provide them with an opportunity to build skills in Bamboo Handicrafts, a **seven-day training (camp) with youth** was organized. The training was provided in Jhabua district given the easy availability of bamboo in the region. It often held in a central village to provide access to all individuals to join such camps. Based on interest and skill, the participants were selected for advanced camps. Basis the interactions with beneficiaries, team noted that:

- 94.7% rated the training as satisfactory.
- 100% felt that the training was taught through effective teaching methodologies and added that these
 camps were usually motivating and interesting. It also enabled them (89.5%) to participate in the advanced
 bamboo training.
- **81.6%** stated that the training helped them **pursue bamboo handicrafts as a livelihood opportunity** and built confidence to become financially independent (39.5%) (Figure 219).



Figure 218: Impact of Basic Bamboo Handicrafts Training (n=38)

Multiple choice question, hence total will not add up to 100%

• Respondents also reported that they **would prefer to spend lesser time (21.1%) on this activity to cover all the course work**. They also felt that the training had some irrelevant topics (e.g., discussion on tools which were not available for practice etc.), which also led to some topics of disinterest for them (5.3% each). However, as per majority of the respondents, there were **no problems with the training and training materials (81.6%).**

5. Skill Development: Advanced Bamboo Handicrafts Training (n=5)

The advanced training was provided in **partnership with an expert designer** which was held **bimonthly in Indore with 10 participants** in each session. This training included product development, prototyping, management of tools, and final product handcrafting ready to go into market. Currently, Shivganga is marketing the Bamboo products through an e-commerce platform (i.e., www.jhabuacrafts.com).

Findings indicate that:

- 100% respondents were satisfied.
- 80% respondents felt that it was a step forward for them to become trainers in bamboo handicrafts.





- All the respondents affirmed in positive that they would suggest these trainings to others. The main reason would be the ease in attending training sessions (80%) and easy teaching methods (60%), among others.
- Due to the high expense of toolkits, only a limited students were provided Handicrafts Workshop Toolkit¹²². Further, it was noted that the skill has not led to any concrete income generation for the individuals considering that the products are being sold through Shivganga and being leveraged for the development and management of their Meghnagar center.

C. Women Empowerment

This section provides an overview of the impact created by various project activities such as empowerment camps, family grove etc. on the lives of tribal women:

1. Women Empowerment Trainings (n=51)

Shivganga involved the tribal women in Jhabua to their holistic development initiative through a series of activities focused around promoting leadership. Empowerment camps were organized at regular intervals with health as the central theme. These women were trained under **Swachh Gaon-Swasth Parivar** to impart knowledge on nutritional plants and combating nutritional deficiencies with an idea to improve health outcomes at family and community level. They were also given a set of nutritional saplings comprising of saplings of fruits, herbs, and medicinal plants to be planted in their households and be used in daily cooking. Our findings indicate that:

- 96% respondents felt it helped in building knowledge for cleanliness and sanitation.
- It also helped them in improving family health (68%), creating knowledge and awareness on health issues (62%) (Figure 220).
- The women were now more aware to identify diseases, ensure timely check-ups of sick members and maintain hygiene and sanitation leading to less chances of getting sick.
- 96% respondents reported a reduction in the family health expenses. Due to reduced expenditure, monthly savings ranging from INR 300/- to INR 1,000/- was reported. All respondents mentioned that they are now well-prepared and equipped in spreading awareness and supporting community members on health-related issues.

Figure 219: Awareness generation and improvement in family health (n=50)



Multiple choice question, hence total will not add up to 100%

 The project encouraged the leadership development among the women. It has enhanced selfconfidence among women to approach their community members and other women of the nearby villages to link them to this initiative.



¹²² Comprises of a set of tools and a shave horse for artisan to sit is provided to the select students. The purpose of this toolkit is to assist an artisan to set an individual workshop at the household level for decentralized production.



• **90%** respondents reported to support fellow community members. In addition to awareness generation, the immersive training methods adopted have imparted other skills in the women leaders such as event management, conducting of trainings, community mobilization, and so on.

"My aunt was severely anemic since the last few years and had been facing several health issues for years. Due to lack of awareness, my family was reluctant in taking her to a standard government or private health facility and had been resorting to the treatment from a quack nearby. I attended the women empowerment training and educated my family on connecting with the nearby health facility to avail treatment for my aunt. Due to this, my aunt's life could be saved from life threatening conditions and her overall health is improved."

As narrated by a tribal woman during interactions

2. Family Grove (n=64)

Planting of nutritional groves in the backyards has proved useful in incorporating regular intake of essential nutrients. Under this activity, fruit bearing and other trees such as mango, guava, mulberry, curry leaves, neem, moringa, jackfruit, lemon, etc. have been planted. The women of the community have also reinitiated cooking traditional, nutritional recipes by sourcing the plants from their local forests.

Based on the discussion with the trainer and beneficiaries of family grove intervention, it was noted that about **1,200 families in 100 villages were provided with 12,000 plants** to promote the initiative. Additionally, more than **105 community members from 48 villages were provided trainings** on plantation and maintenance of the family grove plants. Below depicts the key findings in line with interactions with 64 respondents:

- 58% respondents shared that they have received plants/saplings with an average of 15 saplings.
- **32% respondents** shared that they have **received trainings** under the family grove intervention which has contributed to enhancing their awareness level about the health benefits of practicing family grove.
- Additionally, **11% of the respondents** (n=64) shared that they have received **input supplies such as seeds, composts, and fertilizer** to promote the family grove.
- On probing the impact of this project activity, team noted that:
 - Nutritional intake of **55%** respondents has enhanced because of consuming fruits and vegetable from the family grove. Further, it was shared that prior to the intervention, they were **unaware of the benefits of consuming fruits and vegetables** which they started growing in the family grove.
 - 53% respondents reported a decrease in expenses related to buying fruits and vegetables from outside market due to the family grove. This highlights that the intervention has been able to promote self-sufficiency and cost effectiveness within the households.
 - About **47%** respondents shared that they have been experiencing **medicinal advantages** from the trees planted under the family grove. They shared that the frequency of family members falling sick has reduced significantly and has reduced their spend on buying medicines and other healthcare expenses.
 - **5%** shared that they can generate additional income by selling the surplus produced from their family grove. However, 9% of the respondents stated that their plants/ sapling is at a nascent phase and has not yet developed to the stage where they could experience fruiting or other benefits from it.



D. Organic Farming Training (n=18)

In Jhabua district, the practice of organic farming emerged as a crucial component to promote sustainable agricultural practices. Organic farming, characterised by the avoidance of chemical pesticides and fertilizers, **aligns with the environmental and cultural ethos of the tribal community**. During the interaction, it was shared that organic farming trainings were imparted by Shivganga on a monthly basis. **Refresher trainings were also provided** on weekly and fortnightly basis in line with the community's needs. Figure 220: Farm produce through organic farming technique



- 67% respondents (n=18) shared that they have been a part of exposure visits and 56% of the respondents were part of the demonstration plot technique.
- Training was a mix of both theoretical as well as practical components. 56% respondents participated in the hands-on training activities where they learned about the preparation of soil, bio compost, fertilizers, and pest management of crop through practical trainings. 50% respondents were part of the theoretical sessions which enabled them to conceptualise the technicalities.
- **94%** respondents have witnessed **improvement in the soil health** because of the implication of techniques learnt during the organic farming training.
- 83% respondents noted that the crops produced through organic farming techniques are **healthier and** resilient than those cultivated through conventional farming methods.
- 67% respondents shared that they felt decreased dependence on the chemical inputs as they are able to prepare their own bio fertilizers, bio pesticides and bio compost through locally available resources. They no longer have to commute to the market to purchase chemical inputs, reducing the hassle of transportation.
- 61% respondents reported noticeable enhancement in the crop yield and increased productivity.
- 44% respondents have claimed that organic farming has proven to be economically efficient for them.
- 39% respondents stated that they have an uptick in income through the sale of organically grown
 produce as they have higher selling value in the market as compared to conventional farm produce. On
 probing further, team noted that these respondents sell their farm produce in the local markets (mandi/
 haat).
- 28% respondents mentioned that incorporating organic farming techniques has empowered them to embrace practices which are sustainable and eco-friendly, resonating with the agricultural traditions practiced by their ancestors.



Figure 221: Market for organic farm produce (n=7)

Jhabua Naturals- Jhabua's tribal farmers led social enterprise called "Jhabua Naturals".

• Participants shared that the cost of cultivation through conventional farming has reduced due to the usage of locally available resources used in organic farming. Farmers have also experienced a boost in their annual income as depicted below:



E. Water Conservation and Forest Management

1. Annual Halma Event and Construction of Ponds, Stop Dams

- The tribal community in Jhabua district shared that they faced severe water crisis, which triggered the challenges beyond the need for migration. The depletion of natural resources primarily due to deforestation has resulted in barren hills and exaggerated surface runoff hindering rainwater percolation which resulted in cultivating only one crop per year.
- The project identified this challenge and took initiatives to mitigate it by water conservation by involving the local youth and building their capacity through training camps, wherein they were made aware of the **importance of water conservation through "Jal Andolan"**. To develop the capacity within the village, an initiative called the "Gram Engineering training" was undertaken where the **youth of the village were identified and trained about the technicalities of construction of water harvesting infrastructure such as ponds, check dams, contour trenching etc.** After the completion of the training these individuals identified sites to construct water reservoirs. The process of construction of water infrastructure was carried out by the villagers across Jhabua through halma which is voluntary labor.
- In the year 2021-22, Shivganga undertook the water conservation initiative wherein they constructed three reservoirs with 10 crore liters capacity along with 2 small water structures in the form of bori band acting as check dams (combined capacity to conserve 2.6 crore liters of water).
- The construction of these water infrastructures proved to be **beneficial for the community members as**
 - It facilitated water conservation and ground water recharge
 - They **experienced a tangible reduction in the rate of migration**, due to the availability of water. This has also encouraged them to cultivate crops through both the seasons (kharif and rabi), which was not possible earlier.
 - They also felt reduction in drudgery of women due to reduced water carrying distance, contributing to the health and well-being of the women. The accessibility of water in their own village saves time and allows them to engage in other productive activities
- Further, the construction of these water infrastructures has **revived the ground water level** and has ensured **long term and reliable water supply** for the community and mitigating the risk of water scarcity.
- The water infrastructures constructed has benefitted in mitigation of the surface runoff and erosion. The check dams and reservoirs constructed under the project retains rainwater, preventing excessive runoff. This curtails soil erosion, preventing the fertile soil and protecting agriculture lands.





• The presence of water infrastructure in the village has impacted the wellbeing of the other local animal and bird who were on the verge of vanishing. It has now attracted diverse range of wildlife and promoted biodiversity.

Figure 222: Water Conservation through pond construction



2. Forest Management Sacred Forest Revival Program ("Matavan")

- **"Matavan¹²³"** tradition in Jhabua district, is related to **protection of forests among tribal communities** across India. It demonstrates a deeply rooted commitment to forest conservation.
- This cultural norm indicate that no individual shall **exploit the wood from Forest for personal use**. Matavan plays an important role in the social setting of tribals it is not merely a practical measure, but a cultural norm upheld through generations. The religious rituals and festivals within tribal communities includes paying tribute to the Matavan emphasizing its sacred status.
- This approach from Shivganga has not only contributed to expansion of green cover but has also inculcated the sustainable ethos among the tribal community (which got depleted with time). It has revived the ancestor's cultural norm and the tribe's identity in the region.
- About 23 Matavans have been developed with more than 11,950 trees planted under the initiative to revive forest cover.
- During the interaction with the community members, it was noted that:
 - This project recognised the depletion of this practice from the tribal community and identified it as a medium for implementing forest

Figure 223: Matavan



Figure 224: Afforestation under Matavan



¹²³ Matavan refers to "forests of mother" signifying the connection with mother earth





protection/ enhancement initiative. It **led to strengthen the cultural significance of Matavan tradition** showcasing a harmonious blend of cultural values and ecological responsibility.

- The plantation of trees under Matavan has contributed as a **natural shield against soil erosion**. They have experienced that planting more trees have **minimized erosion of soil** and has been helpful in **preserving the fertility of the soil**.
- Matavan also played crucial role in **mitigating floods** which used to ravage the crops earlier. This has been **beneficial in safeguarding livelihoods and preventing forced migration due to floods**.
- The prohibition of individual utilization of trees planted under Matavan initiative has developed a collective commitment within the tribal community. It has demonstrated the commitment to the shared responsibility for preserving forests and has also developed a sustainable approach in natural resource management.

F. Fellowship Programme

- This initiative facilitated an immersive fellowship experience for researchers and students (fellows) to engage with tribal development issues. The fellows worked with the tribal community on various issues such as health, social entrepreneurship, youth empowerment, etc.
- The fellows get an experience to local development issues while working closely with the tribal community of Jhabua district. This has resulted in an enhancement in the professional and academic trajectories of the fellows by providing them a proximate perspective to picture of the niche reality.
- It was noted that the exposure provided the fellows with an opportunity to hone their leadership skills
 and enabled them to emerge as community leaders and trainers. Along with the community leaders, the
 fellows led key initiatives by providing their technical inputs, pitching of innovative concepts and working
 towards further optimizing the existing project models to enhance their functioning.
- Through the course of the fellowship duration, some fellows have been able to conceptualise, initiate and successfully set up innovative programmes and practices for further enhancing the quality of living of the community members. For instance, the idea of **Jhabua Naturals was initiated by one of the fellows**. Another fellow worked closely with the tribal community has been able to successfully win community forest rights for 4 villages as per the Forest Rights Act, 2006.

16.6. IRECS Analysis

Basis the interactions with the key stakeholders and desk review of the documents, **the impact of the project was also assessed on the IRECS framework parameters**. The IRECS analysis summary has been presented in below table:

Table 30: IRECS Analysis

Parameter	Assessment from study
Inclusiveness	 The project is inclusive in nature as it focuses empowerment and upliftment of the community members beyond demographic bars such as gender, caste, or age and reaches out to socio economically marginalized communities in India.
	 The targeted respondents of the project belonged majorly from Scheduled Tribe (ST) community.
	 The participation of women as 46% of the total respondents (n=256) interviewed are women reflects the gender inclusive nature of the project
	 The project ensured participation of all age groups from the age of less than 20 years and more than 40 years involving the innovation from young age group as well as wisdom from the elderly age groups.





Parameter	Assessment from study
Relevance	• The project is relevant as it addresses the pressing issues faced by the local tribal communities, particularly related to water crisis, migration, and exploitation of villagers due to lack of awareness on various issues.
	These issues had a direct impact on livelihoods, health, education, and environment.
	• The project has provided solutions to these issues through activities such as water conservation through ponds and check dams, environment protection through afforestation activities under "Matavan", land enrichment by promotion of organic farming, and trainings for empowerment of community members in the form of skill development and women empowerment.
Effectiveness	• 60.4% believed that the project has been instrumental in helping them find their lost sense of pride in tribal culture. 52.1% also expressed that with the interventions, they felt responsible for their actions towards the larger community.
	• 69.2% learnt water conservation and afforestation, and agriculture related materials, followed by 61.5% stating that they learnt animal husbandry. 92.3% respondents agreed that the exposure trainings supported them in engaging in a livelihood generation activity . Respondents also stated an increase of approximately 10-20% in their monthly incomes due to the exposure training.
	 Respondents agreed that through the Gram Engineering Training they could apply knowledge in the villages (95%) and reach out to other community members (50%) regarding village issues.
	• 81.6% felt that the bamboo handicrafts training helped them consider pursuing it as a livelihood opportunity and built their confidence to become financially independent (39.5%)
	 96% experienced reduced family health expenses post the women empowerment trainings ranging from INR 300/- to INR 1,000/
	• 32% shared that the family grove intervention contributed to enhancing their awareness level about the health benefits of practicing family grove.
	• The project has been effective in conserving water through construction of water infrastructure, in the form of three reservoirs with 10 crore liters capacity along with 2 small water structures in the form of bori band (check dams) constructed under the project has a combined capacity to conserve 2.6 crore liters of water .
	• These infrastructures have helped the community members by reviving the ground water level and has ensured long term and reliable water supply for the community and mitigated the risk of water scarcity.
	 Availability of water led to enhanced agricultural productivity and the rate of migration has decreased villagers are no longer compelled to seek alternative livelihood because of limited availability of water.
	• The afforestation activities under "matavan" have been impactful as 23 Matavans having more than 11,950 trees planted has improved the green cover and has revived protected forests.





Parameter	Assessment from study
Convergence	• The project has clear convergence with government authorities/ institutions with regards to conduct of exposure visits, however, beyond permissions and other legal documentation for activities such as Halma, Shivganga does not have convergence with the government on other activities.
Sustainability	• The project exhibits sustainable approach by tapping into the enduring strength of the tribal tradition through skill development and youth empowerment building the local capacities and incorporating them into a larger framework. The emphasis on community participation and the preservation and utilization of local resources implies a sustainable approach to the development process and potentially addresses the challenges beyond the immediate scope. However, the project activities need can be run by themselves, as they are still in the phase of expansion.

16.7. Alignment to the Infosys Limited's CSR policy, and UN SDGs

The project is also aligned with Infosys Limited's CSR policy, which mentions health, rural development, gender equality and empowerment of women, environment sustainability as one of the CSR focus areas for Infosys Limited. The project is also aligned with Sustainable Development Goal: SDG 1 No poverty, SDG 3 Good health and well-being, SDG 5 Gender equality, SDG 10 Reduced inequalities, SDG 11 Sustainable cities and communities and SDG 13 Climate action.



16.8. Study Limitation

• Reflecting impact of a single financial year (FY 2021-22): Infosys Foundation is associated with this project from 2010 and since then, it has benefitted 36,356 community members. Hence, the current impact reflected in this project is the cumulative impact created across years and it will be difficult to isolate the benefit for this particular assessment year.

16.9.Case Stories

Case story 1

Raghav (name changed), a farmer from tribal community embarked on a journey to revive his family's legacy. Raghav's ancestors had practiced organic farming for generations, relying on traditional techniques and indigenous knowledge to cultivate their land. However, over year the modern agricultural practices led to abandonment of these techniques bringing in chemical fertilizers and pesticides. Raghav came to know about Shivganga's initiative of promoting organic farming as a sustainable solution intrigued by the prospect of improving soil health reducing input cost and producing healthier crops. He decided to attend one of their training sessions.

Shivganga provided training on organic farming techniques including composting crop rotation intercropping and natural pest management. Through these training sessions Raghav learned about how to harness the power of indigenous techniques and organic input to enrich soil fertility and improve productivity through locally available resources on his farm. He has been able to minimize his cost of cultivation because of reduced amount spent on input supply and more usage of locally available resources and maximized his





profits by selling organic fruits and vegetable in Jhabua Naturals (a shop established by the tribal community members of Jhabua in Indore).

Raghav shared that earlies his annual income from farm was between INR 50,000-60,000 but now after practicing organic farming he is able to get better prices for his produce and is able to earn INR 80,000 to 1,00,000 annually.

Raghav stated that "I am grateful to Infosys and Shivganga for this initiative. Because of the organic farming training received in his village I have an enhanced income".



Abbreviations

Abbreviations	Full forms
AI	Artificial Intelligence
AMC	Annual Maintenance Contract
APF	Art and Photography Foundation
AR	Augmented Reality
BIC	Bangalore International Centre
BPL	Below Poverty Line
CAPI	Computer-Assisted Personal Interviews
CATI	Computer Aided Telephone Interviews
CAWI	Computer-Assisted web interviewing
CGI	Computer Generated Imagery
CL	Confidence Level
СМН	Chinmaya Mission Hospital
COPD	Chronic Obstructive Pulmonary Disease
СРАР	Continuous Positive Airway Pressure
CSO	Civil Society Organisations
CSR	Corporate Social Responsibility
DAY-NRLM	Deendayal Antyodaya Yojana-National Rural Livelihood Mission
FGD	Focused Group Discussion
FY	Financial Year
GHG	Green House Gases
GRAKOOS	Grameena Koolikaarmikara Sanghatane
IAP	Indoor Air Pollution
ICS	Improved Cookstoves
ICU	Intensive Care Unit
IDI	In-depth Interview



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Abbreviations	Full forms
ШТ	Indian Institute of Information Technology
INR	Indian Rupee
IRECS	Inclusiveness, Relevance, Effectiveness & Efficiency, Convergence and Sustainability
ISO	International Organization for Standardization
IT	Information Technology
KPI	Key Performance Indicators
KSWDC	Karnataka State Women's Development Corporation
LGBTQ	Lesbian Gay Bisexual Transgender and Queer
LGBTQIA	Lesbian Gay Bisexual Transgender Queer Intersex Asexual
LPG	Liquefied Petroleum Gas
MAP	Museum of Art and Photography
MGNREGA	Mahatma Gandhi National Rural Employment Guarantee Act
MIS	Management Information System
MOU	Memorandum of Understanding
NEET	National Eligibility cum Entrance Test
NGO	Non-governmental organization
NIV	Non-invasive Ventilation
OP	Outpatient
OSC	One Stop Centers
PCM	Physics Chemistry and Mathematics
PM	Particulate Matter
PO	Purchase Order
PPE	Personal Protective Equipment
PSU	Public Sector Undertaking
PW	Price Waterhouse
PWCALLP	Price Waterhouse Chartered Accountants LLP
RMO	Rajya Mahila Okoota
RTE	Right to Education



Abbreviations	Full forms
SDG	Sustainable Development Goals
SHG	Self-Help Groups
SMC	Student Management Committee
ТТТ	Teach Through Television
UN	United Nations
UNICEF	United Nations Children's Fund
UUI	Udaipur Urja Initiatives
X-Ray	X-radiation









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