

IMPROVING LIVES FOUNDATION



IMPACT REPORT

September 2022

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ATM	Automated Teller Machine	OAHT	OmniActive Health Technologies
ASHA	Accredited Social Health Activist	OD	Open Defecation
CLTS	Community Led Total Sanitation	OECD/DAC	Organization for Economic Co-operation and Development/Development Assistance Committee
CSR	Corporate Social Responsibility	PMFBY	Pradhan Mantri Fasal Bima Yojana
IFA	Iron Folic Acid	RO	Reverse Osmosis
ILF	Improving Lives Foundation	RTE	Right of Children to Free and Compulsory Education Act
KAPY	Krushki Aranya Protsaha Yojana	SDG	Sustainable Development Goals
KCCS	Kisan Credit Card Scheme,	SHG	Self-Help Groups
NIPI	National Iron Plus Initiative	SLTS	School led Total Sanitation
NFHS	National Family Health Survey	UPI	Unified Payments Interface
NPCB	The National Programme for Control of Blindness	UTI	Urinary Tract Infection
NAM	National Agriculture Market	WASH	Water, Sanitation and Hygiene
NABARD	National Bank For Agriculture And Rural Development	WHO	World Health Organization

EXECUTIVE SUMMARY

STUDY OVERVIEW

The Improving Lives Foundation (ILF) was founded as a part of OAHT's Corporate Social Responsibility (CSR) commitments. The Foundation has been working with farmer communities in various districts of Karnataka. Its essential programs include eye camps, malnutrition interventions, water, sanitation, hygiene initiatives, and farmer training programs.

OAHT commissioned this impact assessment study to assess the outcomes of its CSR programs and to shape its future CSR strategies and programming. 126 respondents participated in the study, from the villages of Baragi, Kannegala, Chennamallipura, Hongalli, Berambadi, and Alathur in Gudlupet taluk of Karnataka.

EYE CAMPS

The study data showed that the eye camps organized by OAHT increased access to eye check-ups, both in terms of distance and time taken to avail of a consultation. The infrastructure, staff and doctors, and quality of care provided at the camps were rated positively by all respondents. As per their diagnosis, respondents received free spectacles, were prescribed appropriate medication, and were referred for surgeries.

OAHT also helped organize transport to and from the hospital. All respondents were able to share post-operative care details which were advised by doctors. A very high number of respondents learned about their conditions for the first time owing to this camp and had never seen a doctor for their eye ailments before. Key impacts were seen in the lives of beneficiaries in terms of reduced dependence on family members and improved mobility.

NUTRITION PROGRAM

The Nutrition program conducted awareness sessions and facilitated health check-ups and helped those identified as anaemic in the form of medical supplements and kitchen garden seeds. The program received very positive feedback from respondents. All women felt that the OAHT nutrition program had had an impact on their lives in terms of their awareness and practices regarding nutritional diets.

Most women had checked their haemoglobin levels recently suggesting that there was awareness about it. Awareness on prevention and curative measures for anaemia was limited. More than half the women started taking nutritional supplements owing to the program, while some started their kitchen garden with OAHT's help.

CLTS PROGRAM

Respondents participated in the CLTS Program through varied meetings, training, and in the capacity of CLTS group members and leadership. There was limited engagement of community members with CLTS-organised meetings and training sessions. However, the respondents displayed a good recall of the topics that were discussed. While all respondents had a toilet in their house, only a few credited the CLTS program for its construction.

Open defecation seems to still be prevalent in the village. The respondents also indicated overflowing septic tanks all over the village. The CLTS program has instilled an awareness of hygiene, leading to improved practices. As part of the OAHT's efforts to improve sanitation, 2 toilets had been constructed for Anganwadis in Berambadi.

WATER PROVISION IN SCHOOLS

In the schools visited, out of the 3 RO water filters provided by OAHT, 2 were not functional at the time of the study. The principals said that they did not know how to maintain it and the RO filters needed repair. All 3 principals who were interviewed said that they had been using water stored in tanks earlier which would be unclean and that would result in many students falling sick, and low attendance levels. There were also cost benefits experienced by schools

HANDWASHING PROGRAM

The workshops conducted by OAHT provided information on safety and hygiene measures to combat Covid-19, the benefits of washing hands regularly, and handwashing techniques. The principals of the two schools visited provided very positive feedback on the program, especially the workshop content and demo sessions. Most students remembered what they had learned in the handwashing workshop. Students were aware and had hygiene habits, but sometimes face resource constraints. A lack of WASH infrastructure was noted across the villages and schools.

FARMER EDUCATION PROGRAM

All farmers were able to recollect what was taught to them at the training sessions, which were topics like integrated pest and diseases management, technology usage for farming and organic farming, government subsidies, digital and financial literacy, etc. The feedback on the sessions and benefits received under the farmer education program was favorable. Few respondents received saplings through the KAPY scheme. Respondents also received help from OAHT in availing of government schemes. The program led to an improvement in agricultural practices. Financial inclusion of farmers showcased positive results, but the use of digital tools among farmers was very limited.

RECOMMENDATIONS

Eye camps

- ▶ Increase space at eye camps
- ▶ Recruit youth volunteers to reduce language barriers
- ▶ Conduct recurring camps which offer free medication
- ▶ Organize general health camps with specialists
- ▶ Follow-up camps should be undertaken for people who have been treated earlier
- ▶ Strengthen mobilization and awareness strategies

Nutrition program

- ▶ General health camps should be organized for the women
- ▶ Awareness of menstrual hygiene should be imparted
- ▶ Nutrition support and awareness sessions need to consider local needs and realities
- ▶ Regular revision sessions can be held with the women
- ▶ Tackle social stigmas through sessions with families of the women

CLTS program

- ▶ Incentivize using toilets
- ▶ Strengthen the functioning of the CLTS committee
- ▶ Ameliorate drainage facilities
- ▶ Provide a point of contact for reparation of sanitation facilities
- ▶ Build community toilets

Handwashing awareness

- ▶ Conduct sessions with school staff
- ▶ Follow-up sessions can be arranged with students
- ▶ Link schools to government schemes

Water provision

- ▶ Keep a check on the functionality of RO filters
- ▶ Provide a helpline number
- ▶ Use alternative models of water filters

Farmer education program

- ▶ Access to organic farming to be improved
- ▶ Promote mulching
- ▶ Conduct more regular meetings with innovative topics

Adopt a data-centric approach to implementing, managing, and monitoring the program

01 INTRODUCTION

BACKGROUND

OmniActive Health Technologies (OAHT) is a natural health industry, enhancing nutrition and wellness through scientifically validated natural ingredients. They source high-quality and eco-friendly botanical products directly from farmers to make nutraceuticals (nutritional supplements). The Company was started in 2005 in Pune and has a presence across the states of Karnataka, Tamil Nadu, and Maharashtra in India.

The Improving Lives Foundation (ILF) was founded in 2017 as a part of OAHT's Corporate Social Responsibility (CSR) commitments. The Foundation aims to foster positive change in the community and environment at every step of OAHT's supply chain. ILF supports communities through three primary areas of Health, Environment, and Education. Key programs include eye camps, interventions tackling malnutrition, water, sanitation, and hygiene initiatives, and farmer training programs.

The activities of ILF are in line with Sustainable Development Goals (SDG's) and other national socio-economic development priorities. Good health and wellbeing (SDG 3) are targeted through their health and nutrition programs, while clean water and sanitation (SDG 6) through their community and school level Water Sanitation and Hygiene (WASH) programs. Cross-cutting themes of gender equality (SDG 5) and climate action (SDG 13) are addressed through ILF's engagement with communities.

ILF has been working with farmer communities in various districts of Karnataka. The first interventions were in the Gundlupet taluk (situated in the Chamarajanagar district of Karnataka) in Berambadi and Chennamallipura villages. In 2018, the interventions were extended to other villages in Gundlupet such as Baragi, Kannegala, Maduru, Muntipura, and Lakkipura. Later in 2019-2020, the program was initiated in a few villages in Mysore and Hasana districts.

OAHT commissioned this impact assessment study to assess the degree to which its CSR programs have achieved positive impact outcomes. The objective of the study is to shape all future CSR strategies and programming, by identifying impactful interventions and implementation processes and undertake relevant course corrective measures. Study findings will be used to develop specific impact indicators and facilitate a more strategic approach to impact management and measurement of all CSR interventions implemented by ILF.

CSR INTERVENTIONS

Programs evaluated spanned domains of health and education. Eye camps, WASH interventions like the Community Led Total Sanitation (CLTS) program and handwashing awareness in schools and the nutrition support program tackling malnutrition were covered as part of the health programs. School WASH infrastructure support and farmer training programs were explored within the education theme.

Figure 1:
Program
Overview



HEALTH

- 1 Eye Camps
- 2 WASH



EDUCATION

- 1 School
- 2 Infrastructure

HEALTH



During the initial years of 2017-2019, ILF focused on health as the primary thrust area, with various programs that all aimed at improving health in the rural community of Karnataka where they operated.

IMPROVING EYE HEALTH

Sixteen eye camps were organized between 2017-20 in collaboration with Sankara Eye Foundation. Under their health interventions, ILF conducted eye camps as they believed that eye health is one of the important facets of a healthy life.

Eye camps reached approximately 2752 beneficiaries, with 694 surgeries performed and 879 spectacles distributed (Table 1). The program entailed three implementation phases, i.e.: 1) mobilization and door-to-door surveys, raising awareness for eye health issues in order to help bring the rural community to the eye camps, 2) eye camps, involving screenings to detect cataracts and other eye problems, 3) surgery referrals and support, to those who required surgeries ILF referred them to hospitals and bore the cost of surgeries, and corrective glasses were provided free of cost to those who needed them.

Table 1: Eye Camp Details

Program	2017-2018	2018-2019	2019-2020	Total
No. of Camps Conducted	4	4	8	16
No. of People Screened	714	688	1350	2752
No. of Spectacles Distributed	242	317	320	879
No. of People offered Surgery Support	189	158	347	694

IMPROVING WATER, SANITATION AND HYGIENE (WASH)

In collaboration with FINISH society, ILF implemented a Community-led Total Sanitation (CLTS) program to address WASH-related problems in Berambadi village. A baseline survey conducted in 2018 along with FINISH Society in the Gundlupet region revealed issues with sanitation and hygiene practices, especially in the village of Berambadi. Information was collected from 750 households in the village on demographic details, sanitation and water infrastructure, and hygiene practices. The study revealed that almost 87% did not have household toilets and 41% defecated in the open. More than 80% of the respondents did not wash their hands with soap. All other villages in the cluster had been declared Open Defecation Free (ODF).

The locally formed CLTS group spread awareness of the importance of good sanitation and hygiene practices and the dire impacts of Open Defecation (OD) on public health, their neighbourhood, and the environment. The program engaged men, women, and children in a time-bound campaign to end open defecation and encourage those who did not have toilets to build one. 72 new toilets were built as part of the CLTS effort, and at the end of the year, Berambadi was declared ODF. OAHT additionally repaired 3 Anganwadi toilets.

Understanding the importance of handwashing for overall improvement in WASH status; a handwashing program was implemented in schools for children. The idea was that once children understand the benefits of washing hands and maintaining proper hygiene, they will take it to their families and other community members. The program focused on developing a habit of hand washing through targeted training, daily monitoring, and peer-led efforts. Handwashing workshops were conducted in 6 schools reaching 747 students on proper hand washing techniques.

Recognizing that access to safe drinking water is an important aspect of building healthy communities, OAHT installed Reverse Osmosis (RO) water systems in 9 schools reaching 953 students with access to sufficient, affordable, and clean drinking water.

Table 2: WASH Program Details

Program	Reach and Scale (2017-20)
Community-led Total Sanitation (CLTS)	<ul style="list-style-type: none"> • Door-to-door visits to 450 households • 72 new toilets constructed • 3 Anganwadi toilets repaired
Handwashing Awareness in Schools	7 schools reaching 747 students
Drinking Water Support	RO plants installed in 9 schools covering 953 students

IMPROVING NUTRITION

ILF started the nutrition program by focusing on anaemia as it was identified as a serious problem in the region by the Primary Health Centre of Gundlupet¹. The nutrition program addressed curative and preventive aspects of anaemia. The program was initially undertaken in Berambadi, Hongalli, and Chennamallipura and later extended to Baragi, Kannegala, Muntipura, and Madduru.

Curative care was extended through a three-pronged approach, i.e. 1) Awareness about anaemia through community meetings and discussions, helping people understand the importance of nutrition and the issues associated with anaemia, 2) Testing and treatment, haemoglobin levels for women was tested through blood camps at the Public Health Centre (PHC) and door to door screenings (which was facilitated and monitored by the local medical authority) and 3) Medical interventions for those identified with anaemia, like distribution of IFA tablets and iron injections for severe anaemia.

The preventive aspect of the program entailed the setting up of kitchen gardens. This intervention provided women with vegetable seeds and encouraged women to grow nutritious vegetables and fruits for their own consumption and for their household. Apart from promoting nutrition awareness, ILF conducted awareness drives among women to improve menstrual hygiene. The vision of the program was to make the villages self-sufficient by establishing Self-Help Groups (SHGs) to make sanitary napkins and distribute them locally. However, due to many cultural taboos, the program was discontinued. 250 adolescents/women attended workshops on hygienic menstrual practices.

Table 3: Nutrition Program Details

Program	2018-2019	2019-2020	2020-2021	Total
No. of women who attended awareness workshops	258	643	0	901
No of women screened for anaemia	571	1784	60	2415
No. of women treated for anaemia	189	514	0	703
No. of kitchen gardens started	420	185	86	691

EDUCATION

In 2019, Education was included as a focus area, as part of which farmer training programs were implemented. The program consisted of three modules: basic literacy, digital literacy, and good agricultural practices. The good agricultural practices module helped farmers learn techniques to keep their farm free of chemicals such as mulching, application of pest control, snipping, etc. The program was initiated in Berambadi, Chennamallipura, and Hongalli. Apart from this, a program for youth farmers was undertaken to promote innovative agricultural practices and inspire them to stay in the agricultural sector.

ILF raised awareness among farmers about government schemes like the “Krusha Aranya Protsaha Yojana (KAPY)” and facilitated the application process. KAPY aims to promote the cooperation of farmers in the task of increasing forest and tree cover. Under the scheme, farmers were provided saplings at subsidized rates from the nearest nurseries of the Forest Department for planting on their lands and given monetary incentives for every surviving sapling.

Table 4: Farmer Education Program Details

Program	2018-2019	2019-2020	2020-2021	Total
No. of farmers attending training programs	197	451	0	648
No. of youth farmers attending training programs	0	105	115	220
No. of farmers provided saplings under KAPY	0	0	193	193
No. of saplings provided under KAPY	0	0	17783	17783



Farmer interview being conducted in Baragi

02 SCOPE AND METHODOLOGY

STUDY OBJECTIVES

The impact study was undertaken to assess the programmatic impact and suggest recommendations for course corrective actions to scale activities that showcase significant potential for positive social impact. The specific objectives of the study were to assist in understanding and analysing the program based on the evaluation criteria defined by OECD/DAC i.e., relevance of interventions, coherence with national and international development priorities and actions, program effectiveness gauged through stakeholder feedback, areas of impact, and sustainability.

The study adopted a mixed methods approach. Quantitative information and qualitative inputs were garnered through semi-structured interviews. The technology platform SurveyCTO was used to collect data.

SAMPLING STRATEGY

126 respondents participated in the study. Purposive sampling was adopted for the study, accounting for the distribution of the sample as per the number of beneficiaries reached through each program overall. Households were selected from 6 villages of Baragi, Kannegala, Chennamallipura, Hongalli, Berambadi, and Alathur, where multiple activities and programs have been conducted.

Program	Respondent Type	Total respondents
1 Eye camp	Eye camp beneficiaries	39
2 CLTS	CLTS beneficiaries	25
3 Handwashing	Student beneficiaries	14
	School principals	2
4 RO Water filter provision	School principals	3
5 Women nutrition	Women beneficiaries	24
	ASHA worker	1
6 Farmer education	Farmer beneficiaries	18
	Total	126

Apart from the interviews and group discussions, two Anganwadi toilets constructed by OAHT were visited.

While the sampling was purposive, a proportion to percentage was maintained depending on the extent of beneficiary reach and programs implemented in villages. 27% respondents were from Hongalli, 25% were from Berambadi, 19% were from Chennamallipura, 11% from Baragi, 10% of the respondents were from Kannegala while 7% were from Alathur (Annex 1).

Out of the total 126 respondents, 54% of them were males and 46% were females. The proportion of males is higher because a lot of the women participants of the program would be on field and were unavailable for the interviews.

On an average a household had a member(/s) participating in any 1 program conducted by OAHT. This suggests that mostly multiple members from the same household were not a part of different programs conducted.

RESEARCH TOOLS

Based on the type of stakeholder, tools were developed to gain insights on program implementation, feedback, and corresponding impacts. These included:

- ▶ **Surveys and interviews were conducted** with eye camp beneficiaries, CLTS program participants, principals of schools where drinking water support was offered, women who were offered nutrition support in terms of medical interventions and kitchen gardens, ASHA workers who facilitated these activities within local communities and farmers who participated in training workshops and were connected with the KAPY scheme.

- ▶ **Participatory tools and exercises were undertaken.** This included the Card Sorting and Three Pile Sorting exercises with community members to gauge WASH conditions, knowledge and practices of community members and students in schools. In addition, Hypothetical Budgets and Temperature Gauge exercises were undertaken with women who participated in the nutrition program.

- ▶ **Observation tools were scheduled to understand WASH and school infrastructure.** Details were substantiated with focus group discussions. nutrition program.

DATA COLLECTION

To ensure consistency of research and quality data collection, multiple trainings were conducted with surveyors. They were briefed on the program context, research background, objectives, and basic research ethics to be followed to form positive relationships with respondents.

The data collection occurred between 28th June to 1st July 2022. A pilot study was done on 28th June 2022, to test the survey tools and get some context of the villages under the purview of the study. A team of 8 staff (2 research supervisors and 6 field enumerators) managed the data collection of 126 program beneficiaries.

DATA ANALYSIS

The analysis of data was done at the individual and household levels. Respondents were categorized according to the areas of intervention they have been affected by. After exporting the data, the respondents were given a unique ID.

Data Analysis was undertaken at three levels: 1. Review of available data of total sample frame 2. Quantitative Data Analysis 3. Qualitative Data Analysis.

The data from the different tools were transcribed in a systematic manner and entered into the indicator grid of the different programs. The process and implementation were evaluated based on the OECD/DAC criteria.

The technology platform - Survey CTO allows the research team to clean the data directly and csv files are available to analyze on different analytical platforms like R, SPSS, or Excel.

STUDY LIMITATIONS AND MITIGATION STRATEGIES

Data collection and analysis was carried out in a sound way that allowed for evidence-based conclusions and analysis-based recommendations. A few challenges and considerations, however, must be brought to light. The evaluation study does not have any baseline data that could be used as a reference, against which the impact can be measured. There are likely to be potential biases in the survey responses due to subjective differences in understanding questions. There is a possibility of bias in the responses of beneficiaries, due to the fact that they share a beneficial professional relationship with the program. In addition, the survey documents the responses given by stakeholders but they may not actually reflect their practices.

At a data collection level, due to the unavailability of specific beneficiary data for certain programs like the farmer education program, mainly convenience sampling was used in which the OmniActive field staff helped get respondents who were available for the interview. The OmniActive team was very cooperative and helped in finding respondents from different villages and clusters to have a fair representation in the sample. A few other organizations had also worked with the villagers towards programs like the eye camp. There were two eye camp beneficiaries who confused the OmniActive eye camp with another one that they had visited. Respondents were given a brief about the program to check if they had actually attended the program. Responses given by the two beneficiaries about another eye camp were filtered out.

Certain beneficiaries from programs like eye camp and nutrition program had attended these programs in 2017 and had difficulty recalling exact details. This issue was mainly faced by respondents who were old. Data enumerators tried to ask follow-up questions to probe specific answers or asked family members to assist the respondent if they couldn't remember certain details. Some teachers and principals who had been in the school during the handwashing program had been transferred so the current school staff did not know details about the program conducted. Teachers and principals who were present in the school when the handwashing program was conducted were interviewed instead. The participatory tools were conducted in a group, so there could have been a response bias to give the right-sounding answer rather than the real answer. As much as possible, non-verbal tools like cards, charts, etc were used. Participants were asked follow-up questions by the data enumerators to get more qualitative data on their responses.



Villagers being given information about eye camps

03 FINDINGS AND RESULTS



EYE CAMPS

RESPONDENT PROFILES

The eye camp survey included 39 respondents out of which, 59% were males and 41% were females. The different villages they were conducted in include Alathur, Baragi, Berambadi, Chennamallipura, Hongalli and Kannegela. The highest representation was from beneficiaries who had attended the camps in 2018. Average age of beneficiaries consulted for this study was 65 years.

Eye Camp Year	2017	2018	2019	2020
No. of Respondents	6	16	9	7

PROGRAM RELEVANCE AND COHERENCE

The burden of blindness in India contributes to nearly one fifth of the global blindness burden². According to the World Health Organisation (WHO) the country has around 12 million individuals with visual impairment as against the global total of 39 million.

Cataract and refractive errors constitute more than 80% of the blindness and are largely avoidable³. The root cause for the increase in the numbers of patients with blindness in India is the insufficient mechanism for primary eye care. There are only about 12,000 ophthalmologists in India for its one billion-plus population, amounting to a ratio of one ophthalmologist for every 90,000 people. With eye care featuring in the lowest rung for personal healthcare, the problem is exacerbated by a general lack of awareness and poor access to eye care professionals.

The prevalence of blindness is higher among those in lower socio-economic status. Major factors leading to the high prevalence of ocular morbidity in India also includes misconceptions about accessing eye care and undergoing cataract surgeries, compromised environmental conditions, compounded by a lack of effective eye health education programs. Data points towards the impending need of bringing focus on encouraging people to get their eyes checked at regular intervals to avoid blindness, which have immediate and long-term consequences such as loss of educational and employment, loss of economic gain for individuals, families and societies, and an impaired quality of life.

Eye camps play a vital role in reaching untreated poor blind people in rural areas. The National Programme for Control of Blindness (NPCB), the 'Vision 2020: The Right to Sight' program, and the Karnataka State's priorities of controlling blindness by collaborating with eye hospitals; along with numerous studies in this domain highlight the importance of outreach camps in diagnosing and treating eye conditions in rural areas.

The main objective of eye camps are to create awareness and treat vulnerable communities for avoidable blindness. It is certain that factors that contribute to blindness can be controlled, and free check-ups are an important means to recognize these complications before they worsen.

OAHT conducts comprehensive diagnostic eye camps which acts as a population screening service, providing non-surgical treatment services for eye disorders and referral services for patients requiring surgery.

²National Programme for Control of Blindness (NPCB), 2013
³Murthy GV, Gupta SK, Bachani D, Jose R, John N. Current estimates of blindness in India (2005)



IMPLEMENTATION EFFECTIVENESS AND FEEDBACK

People were informed about the camps mainly through door-to-door campaigns (97%), village level communication material like posters and wall paintings (64%) and referrals (18%) by others who had visited these camps earlier.

Figure 2:
Mobilisation
Methods



Door to Door
Campaigns



Posters and
Wall Art



Referrals and
Word of Mouth

Data showcases that the camp increases access to eye check-ups, both in terms of distance and time taken to avail of a consultation. Over the past 4 years (2017-20), the camp reached several villages, with respondents stating that the average distance between their residence and the eye camps is 5km., while the average time taken is 16 minutes.

Average distance to the eye camp from residences

5 kilometres

Average time to travel to the eye camp from residences

16 minutes

In absence of these camps, people would have to visit neighbouring Government hospitals, Public Health Centres (PHCs) or private hospitals for ophthalmology services. This includes:

- ▶ Government hospital in Gundlupet, located at an average of 10 kms, around 30 mins travel time from villages, travel costing around INR. 45; with free consultations
- ▶ PHCs in Baragi and Gundlupet, located at an average of 6 kms, around 20 mins travel time from villages, travel costing around INR. 60; with free consultations
- ▶ Private hospitals like KR Hospital in Mysore, located 80 kms, around 1.5 hours travel time, costing around INR. 200 with average consultation costs of INR. 100.

The elders of the village are unable to make long travels to hospitals, so these camps conducted in the village itself are a blessing!

~ Eye Camp Beneficiary, Female, 78, Baragi



Respondents stated that the waiting time is considerable owing to high patient loads at these facilities. Since most of them have to be accompanied by family members, they have to miss workdays, and hence prefer not to make the travel. The range of ophthalmology services are also very limited at the Government facilities, and many times specialists are not available on the day of visit, which is addressed by the program. The average wait time at the eye camps was recorded at 47 minutes, which as per respondents was still lower than the total travel time and waiting times at the other health facilities.

Average waiting time for consultation at the eye camp

47 minutes

Government hospitals do not give time and information to patients, and at times we are not treated well!

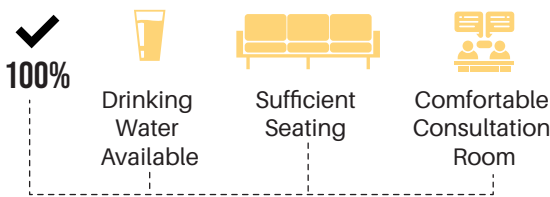
~ Eye Camp Beneficiary, Female, 55, Kannegela



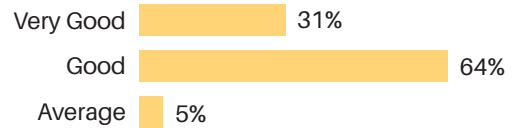


Infrastructure provisions, staff and doctors, and quality of care provided at the camps was rated positively by all respondents. All respondents agreed that adequate drinking water and seating was available at the camps. They also positively responded to the consultation space and medical equipment. Overall, the eye camps received very positive feedback on perception ratings.

Figure 3: Program Feedback



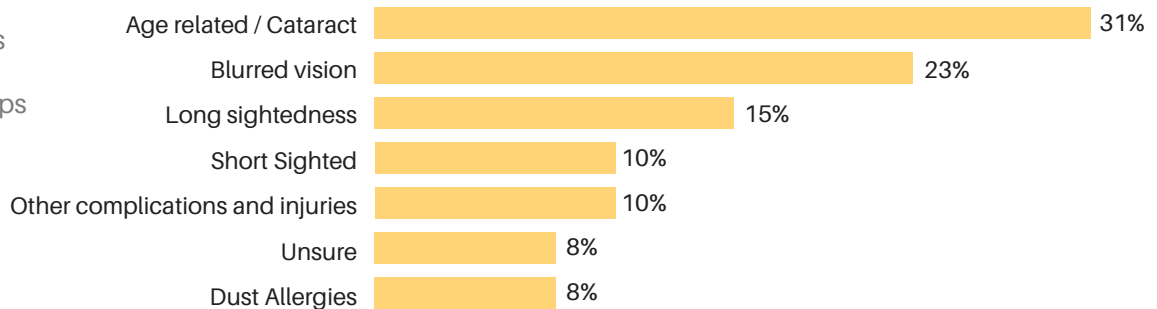
Eye Camp Rating N=39



While a large majority of respondents (74%) appeared to face no language hurdles, a minority (26%) indicated an inability to converse with the staff and doctors due to language barriers. However, all respondents were able to provide details on their diagnosis and treatment measures told to them at the eye camps. They were informed about their exact diagnosis and conditions, causes and symptoms, and were provided prescriptions, spectacles and referrals for surgeries. Owing to the demographic, mainly comprising senior citizens, cataract and blurred vision emerged as the most common conditions.

Figure 4: Conditions diagnosed at the camps

Conditions diagnosed at the camp N=39



As per their diagnosis, respondents received free spectacles (90%), were prescribed appropriate medication (69%) and referred for surgeries (64%). These additional support aspects were greatly appreciated since the program went beyond just diagnosis to offering treatment plans to all those who attended the camps.

Figure 5: Type of additional support received at the camps

Type of support received N=39



Eye camp beneficiary interview in Baragi



OAHT team at an Eye camp commencement event

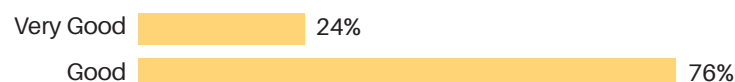


Of those who were referred for surgeries, an average wait time of 3 days was recorded before they were taken to the Sankara Eye Hospital in Bangalore. Most respondents (76%) stayed in the hospital for a maximum of 3 days, while others (16%) were required to remain in care for nearly a week, with less than a handful of respondents (8%) having to stay back for longer.

Average waiting days to undergo surgery	3 days
Average distance to hospital	181 kilometres
Average time taken to reach hospital	4 hours
Average number of days admitted	3 days

All respondents credited the ILF/ Sankara Foundation with organizing transport to and from the hospital. Travel costs to Bangalore were estimated at INR. 1000 by respondents which they did not have to bear owing to this support and was greatly appreciated by them. Quality of care provided by the doctors and medical staff was rated very positively and not a single person faced any issues.

Surgery Support Rating N=25



All respondents were able to share post-operative care details which were advised by doctors, showcasing a high level of awareness amongst them. This included wearing of eye gear, staying indoors, taking medication regularly, using eye drops, avoiding head baths and oiling of hair, eating meals on time, not working in the sun or in field, etc.

Few respondents (16%) stated they were unable to get adequate post operative care mainly owing to low awareness, financial constraints, and unavailability of transport. Most respondents (64%) visited the hospital after surgery for a follow-up check, with the help of their family members and ILF/Sankara Foundation. Respondents were also provided with transport support by ILF/Sankara Foundation, barring a few (12%) who arranged for transport themselves.

AREAS OF IMPACT

A very high number of respondents (77%) learnt about their conditions for the first time owing to this camp and had never seen a doctor for their eye ailments before (92%). As is well-known, most times in rural areas because of lack of awareness, inadequate local healthcare facilities or medical professionals available, and the distance and costs associated with visiting health facilities, people do not even know of their conditions, let alone get the required medical information and treatment. Of those who had seen a doctor before had incurred high costs between INR. 2000-3000, in addition to travel costs.

	N=39	
	Yes	No
Learnt about their condition for the first time	77%	23%
Had seen a doctor for their condition before	8%	92%
Recommended the eye camp to others	95%	5%

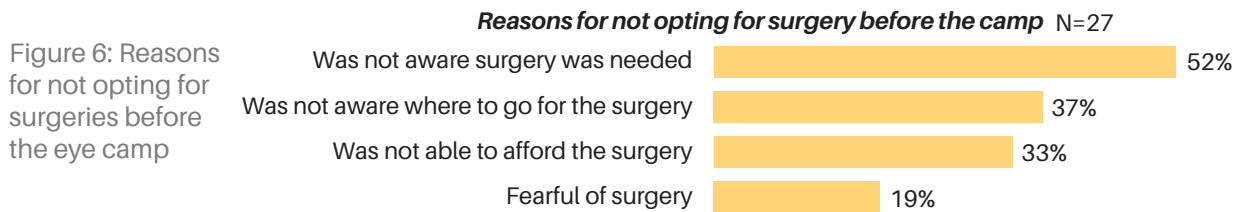
Private hospitals are expensive, whereas eye camps are free. These camps help our village people who could not afford a consultation and surgery costs. It mainly helps elderly people because family members will not be ready to invest money in their eye surgery.

~ Eye Camp Beneficiary, Female, 55, Kannegela





The largest proportion of respondents (56%) did not opt for surgeries before the camp mainly because they were not aware that they needed surgery. Respondents also were unaware where they could get their surgeries done (40%) and felt that affordability was a major deterrent to them opting for surgery (36%). Few were also scared of surgeries (20%), but the eye camp and the staff gave them the confidence to go ahead.



The average amount as per respondents that such surgeries would cost amounted to INR. 16,352. This is a very high amount among communities where the program is implemented, and surgery support is offered with average household monthly incomes ranging between INR. 5000 to 10,000. Further, many times health of the elderly is ignored mainly owing to the costs of healthcare which families are just not able to afford.



Eye camp beneficiaries in Berambadi

Several elderly people in our village have health and eye problems. Even if we know of them, since we are so poor, we do not have the finances and are really not able spend money on operations!

~ Eye Camp Beneficiary, Male, 67 years, Baragi



Key impacts were seen in the lives of beneficiaries in terms of reduced dependence on family members and improved mobility. Of those dependent on their family members can now undertake household chores, read and write without assistance, are able to work independently in farming activities, and can go to banks and post offices without chaperones. Many were not able to move around the house and visit the market, bank, social functions, etc. on their own before the eye camp and surgery. Now all of them have improved mobility. Respondents struggled with social interactions and active participation in social and family, which has been addressed by the program. They were also depressed owing to a lack of mobility and social interactions which has been resolved owing to the support received.

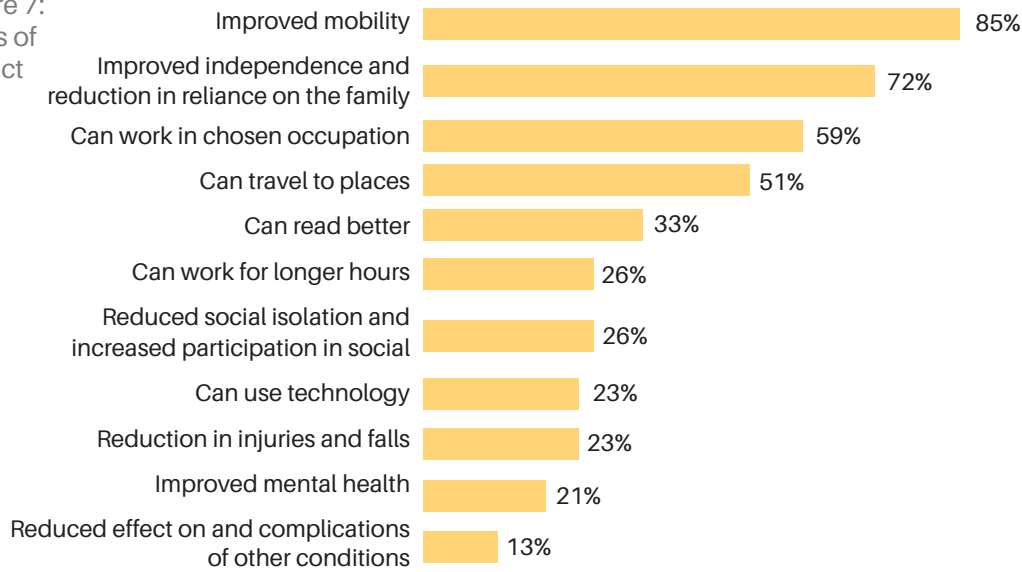
I am now independent and am able to interact with people, and I can go out and take part in social activities.

~ Eye Camp Beneficiary, Male, 60, Alathur



Areas of Impact for Eye Camps N=39

Figure 7:
Areas of
Impact



After this surgery, I have been able to participate in social functions and have also been able to return to work.

~ Eye Camp Beneficiary, Female, 55, Kannegela

I can now go to the market and the banks alone, without any issues.

~ Eye Camp Beneficiary, Male, 68, Berambadi

SUSTAINABILITY OF IMPACTS

Unfortunately, owing to the age demographic, poor post/self-care practices and a lack of sustained health support, few respondents (49%) are still facing eye ailment issues. Those who face issues mention having blurred vision and watering eyes recur after the camp and surgery. Few state their power has increased, while some were treated for one eye and now the other eye is facing similar complexities. This is also attributed to the pollution and high level of dust along with existing morbidities which tend to exacerbate eye conditions like diabetes.



An eye camp beneficiary discusses her experience in Hongalli



Interview with an eye camp beneficiary in Baragi



NUTRITION PROGRAM

RESPONDENT PROFILES

18 women respondents were interviewed for the Nutrition Program, while 6 women were included in the group discussion, amounting to a total of 24 respondents. They were from villages of Baragi, Kannegala, Chennamallipura, Hongalli, Berambadi, and Alathur. The average age for respondents was 36. An ASHA worker was also interviewed as part of the Nutrition program, she was 28 years old and had been operating as an ASHA worker for 9 years.

PROGRAM RELEVANCE AND COHERENCE

India ranks 170 out of 180 countries for anaemia among women⁴. Iron-deficiency anaemia reduces the work capacity of individuals and entire populations, bringing serious economic consequences and obstacles to national development, according to the World Health Organization (WHO). The primary cause of anaemia is iron deficiency which has serious health consequences for both women and children. Among women, iron deficiency prevalence is higher than in men due to iron loss during menstruation and the high iron demands of a growing fetus during pregnancy. 61% of women who are breastfeeding are anaemic, compared with 52% of women who are pregnant and 57% of women who are neither pregnant nor breastfeeding⁵.

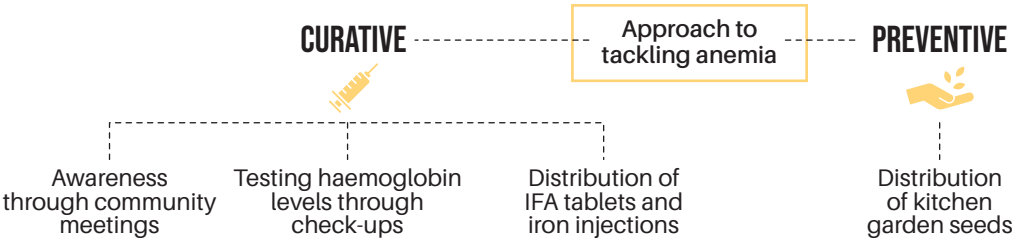
Several studies note that anaemia prevalence is far more pronounced in rural areas in comparison to urban areas of India. The high level of anaemia among rural women is likely related to inadequate dietary intake, absence of nutritional education during pregnancy, inaccessibility of health-care services and high blood loss during delivery. Anaemia was the top cause of maternal deaths in India (50%) and the associate cause in 20% of maternal deaths. Currently, Karnataka is among the states with the highest anaemia burden: 61% of children below 5 years of age, 45% of pregnant women, 45% of all women, and over 18% of men have low haemoglobin levels.

Anaemia in our villages is caused due to poor diets, low awareness, limited testing, lack of nutritional support and pregnancy.
~ ASHA Worker, Berambadi

Since the 1970s, the Government of India has been putting in place dedicated, promotive and preventive strategies to make India anaemia-free. The National Nutritional Anaemia Control program in India focuses on three vital strategies: promotion of regular consumption of foods rich in iron, provisions of iron and folate supplements in the form of tablets to the high-risk groups, and identification and treatment of severely anaemic cases. The National Iron Plus Initiative (NIPI) program and the Anaemia Mukta Abhiyan also focuses on behaviour change to promote a nutritious diet and increase compliance with iron supplements, testing of anaemia, and addressing non-nutritional causes of anaemia.

OAHT's nutrition program is aligned with the ongoing efforts that the Indian government has been striving for. The program addressed curative and preventive aspects of anaemia through spreading awareness about anaemia and the importance of nutrition, conducting anaemia health check-ups, distributing Iron Folic Acid (IFA) tablets and iron injections, and lastly providing women with kitchen garden seeds to grow nutritious fruits and vegetables.

Figure 8: Nutrition Program Interventions



⁴Global nutrition survey, 2016
⁵National Family Health Survey (2019-20)



The average age of the women respondents in the sample was 36 which means most of them were around childbearing age. Anaemia was also identified as a serious problem by the PHC of Gundlupet. Overall data showcases that OAHT’s nutrition program conducted in Gundlupet district in Karnataka was very relevant to tackle a problem that is very prominent in India.

IMPLEMENTATION EFFECTIVENESS AND FEEDBACK

The program conducted awareness sessions and facilitated health check-ups and helped those identified as anaemic in the form of medical supplements and kitchen garden seeds. All women respondents who were interviewed had attended the awareness sessions and undergone an anaemia check-up. However, only a few (50%) were provided with medical supplements like IFA tablets and iron injections through the program and received seeds for their kitchen garden (50%).

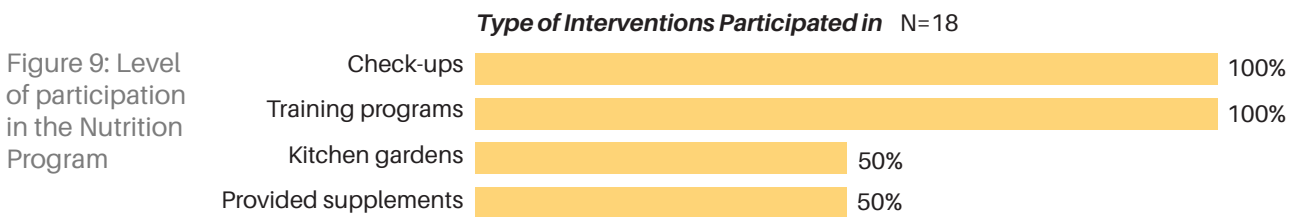


Figure 9: Level of participation in the Nutrition Program

Most respondents were able to recall aspects of the program. Women underwent health check-ups at the Primary Health Centre (PHC), while a few of them were also checked at home or at Anganwadis by an ASHA worker. The tests done were to check haemoglobin, blood pressure, and sugar. The women were told to take good care of their health and nutrition. The advice given to them after the check-up was to consume nutritious food like green vegetables, fruits, and dairy. The women were also advised to take iron supplements and IFA tablets if their haemoglobin levels were low. Awareness sessions shared information on the causes, symptoms, and preventive measures of anaemia and provided nutrition advice to participants. Respondents said that they learned about the importance of improved sanitation and menstrual hygiene in these workshops. Of the women who received IFA tablets, some received them either weekly or monthly. Half of the respondents took nutritional supplements like IFA tablets and iron injections while they were pregnant. Most of them got it from the Anganwadis through OAHT while others either bought it themselves or got it from government hospitals. The women who were provided with kitchen garden seeds received seeds like spinach, ridge gourd, radish, lady finger, tomato, and beans. OAHT also advised them on seed plantation and care and gave counselling on how to maintain a healthy diet.

Figure 10: Details on Nutrition Program Interventions

Awareness sessions shared information on the causes, symptoms, and preventive measures of anaemia and provided nutrition advice to participants.

Women underwent health check-ups at the Primary Health Centre to test haemoglobin, blood pressure, and sugar levels.



Women received IFA tablets and iron injections either weekly or monthly, especially if they were pregnant.

Seeds for spinach, ridge gourd, radish, lady finger, tomato, and beans were provided along with information on seed plantation and care.

The program received very positive feedback from respondents. None of the women faced any challenges with the medical supplements provided by OAHT. Most of the respondents did not face any challenges in starting a kitchen garden except one who said that they lacked the knowledge to maintain a kitchen garden while one said that their seeds were not of good quality. Many also stated that sometimes kitchen gardens failed since there was not sufficient water.



AREAS OF IMPACT

All women felt that the OAHT nutrition program had had an impact on their lives in terms of their awareness and practices regarding nutritional diets. After attending the awareness session and the health check-up, almost all women improved their food intake and took regular meals. Almost all women agreed that they changed their diet, the kinds of food and the amount of food that they eat as a result of receiving nutrition advice in the program. However, some women said that sometimes they keep track of what they eat, and sometimes they ignore it which shows that they are not very consistent in taking care of their health. The women in the sample said that owing to the program they have started eating fruits and vegetables more regularly (41%) and that they now eat 3 meals a day (25%). They said that women in the community ate as many meals as men and include vegetables in their meals. Food items like dal, rice, vegetables, fruits and milk were consumed by most women on a daily basis. Dosa, meat, potato and roti were consumed less frequently. They were able to articulate that a well-balanced diet is required for adequate amounts of protein, fat, carbohydrates, vitamins, and minerals. The ASHA worker did also recognise that the program has played a major role in improving women's and their families' diets.

I have started eating three meals a day and included fruits and vegetables in my diet. Following this practice has improved my haemoglobin levels.

~ Female, 36 years, Hongalli



However, the ASHA worker provided a less positive picture saying that not all women get access to 3 meals a day because of poverty, beliefs and perceptions, family restrictions, low awareness and low access.

In terms of impacts on awareness and anaemia management, most women had checked their haemoglobin levels recently (58%) suggesting that there was awareness about it. Women said that people usually get their haemoglobin checked from PHCs or Community Health Centres (CHC). Women showcased an awareness on the causes of anaemia like consuming less food or food that is poor in nutrition but could not articulate specific reasons like iron deficiency, vitamin deficiency, etc. They however knew that anaemia doesn't go away on its own and can be cured by consuming nutritious food and supplements. Not all women in the group knew how to tackle anaemia. Women also became aware of the importance of sanitation and hygiene through the program.

During the participatory exercise gauging awareness on prevention and curative measures of anaemia, very limited responses were garnered. They all said that they would donate the money to those who need treatments for anaemia, and to provide supplements for anaemia. They also allocated some money to give vegetables, fruits, and other nutritious food to those who are economically poor and backward.

More than half the women stated to having started taking nutritional supplements owing to the program. A few women currently took nutritional supplements (12%). According to them, all pregnant women wanted to consume iron supplements and IFA tablets but sometimes were not able to procure them. The ASHA worker also said that almost 80% of the women took nutritional supplements during pregnancy and lactation.

Some women (37%) started their kitchen garden with OAHT's help and now have access to nutritious fruits/vegetables for themselves and their family. 25% women currently grow fruits and vegetables in their kitchen garden. Most of them use the produce for household consumption while 1 sells it in the market as well. Almost all respondents procure fruits and vegetables from the market and most pay less than INR 2000 per month for it.

I have learnt how to consume meals that are nutritious, and I can now suggest others do the same.

~ Female, 26 years, Chennamallipura

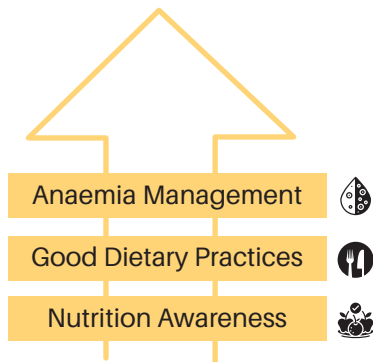




Very few women currently faced issues like weakness and dizziness indicating that anaemia symptoms were not very prevalent among interviewed women. Of those who had recently checked their haemoglobin levels, most of them either had their haemoglobin levels in the healthy range between 12-15 g/dL (30%) or at the borderline of 11 g/dL (46%)⁶. Most of the women had not fallen sick in the last three months, which is an indicator of them being healthy.

The program has helped in making the immune system of women stronger which has led to safer pregnancies and childbirth. The count of malnourished people in the village has also reduced.
 ~ ASHA worker, Berambadi

Figure 11:
Overview of
Impact Areas



Undertaking a participatory tool to gauge nutritional awareness in Chenamallipura

SUSTAINABILITY OF IMPACTS

Findings show that awareness sessions and health check-ups raise awareness among communities but for impacts to be sustainable, conversations around nutrition, diets and anaemia management have to be regular. The ASHA worker mentioned that women need revision sessions to make sure that they retain the knowledge and take care of their health more consistently. It was seen that most women did see an improvement in their dietary habits and awareness after the program. However, the women were not sure of the specifics of the causes, symptoms or treatment of anaemia at the time of the study. It could also be that since they attended the program a few years back they may have forgotten certain aspects of it. Previous research on government efforts to alleviate anaemia, also suggests that merely providing iron supplements is not effective unless appropriate awareness is spread among the population to ensure the consumption of nutritious food and medical supplements.



Interview with Nutrition Program Participant in Chenamallipura

⁶The normal haemoglobin for women is 12 grams per decilitre (g/dL) and for men 13 g/dL.v

COMMUNITY LED TOTAL SANITATION (CLTS) PROGRAM



RESPONDENT PROFILES

The CLTS survey included 17 respondents while a group discussion was held with 8 respondents, amounting to a total of 25 participants in the study. Of those 76% were males and 24% were females, all from Berambadi village. The average age of the respondents was 39 years old. Two respondents were a Committee Leader and Committee Member of the CLTS, while the remaining respondents attended discussions, meetings and workshops organized by the committee.

PROGRAM RELEVANCE AND COHERENCE

15% of India's total population still defecates in the open⁷, 1% of whom reside in urban areas, while 22% live in rural areas. India has witnessed the biggest drop in absolute numbers in open defecation since 2015, but much work remains to be done yet. Water, Health and Sanitation (WASH) for all is an initiative that emphasizes the teachings of basic sanitation and hygiene to communities. Several development agencies have called for the propagation of WASH, as it holds the potential to reduce illnesses and deaths, while elevating socio-economic conditions.

An impactful means to promote WASH initiatives, has been through Community Led Total Sanitation (CLTS) programs. CLTS has proved to be an effective means to tackling challenges in sanitation and has been employed by actors across Southeast Asia and Africa. The essence of CLTS is to empower local communities to perform their own analysis and take action to bring about the necessary changes. It is one of the most prominent strategic approaches undertaken to inform awareness and sensitize communities on the cruciality of maintaining health and hygiene.

Introduced in India in 2002, different adaptations of the CLTS have been implemented in states across India. The aims of the CLTS programs are

- ▶ To provide the state, districts, blocks and villages with ideas and means to accelerate progress towards sustainable and equitable ODF results.
- ▶ To learn from successful experiences and to provide opportunities for sharing insights, innovations and successful practices in other districts including methods, processes and approaches developed by peers in other districts.
- ▶ To make these accessible for adoption and/or adaptation by other districts.

The CLTS program undertaken by OAHT's ILF in Berambadi in order to make it ODF is not only relevant but also coherent with the work undertaken by organizations both internationally and nationally. The Swachh Bharat Mission guidelines emphasise the need to adopt community led and community saturation approaches with a strong focus on collective behaviour change. Emphasis is also placed on awareness generation, triggering behaviour change and demand generation for entire communities. Toilets in schools and other public places, and solid and liquid waste management are also a focus.

The locally formed CLTS group, brought into inception in 2017, has been an important means of awareness on the importance of good sanitation and hygiene practices. They dispensed information about the dire impacts of Open Defecation (OD) on public health, their neighbourhood and environment. The program engaged men, women, and children in a time bound campaign to end OD and encourage those who did not have toilets to build one.

⁷Joint Monitoring Program for Water Supply, Sanitation and Hygiene, World Health Organization and UNICEF (2021)



IMPLEMENTATION EFFECTIVENESS AND FEEDBACK

Information about the CLTS programme was disseminated mainly through the door-to-door approach (71%) along with the circulation of posters (53%) and word of mouth (41%). However, the cruciality of the Anganwadi, ASHA, and Gram Panchayat members to strengthen community networks was visible in the respondents who learned about the CLTS programs via their efforts (18%).

Respondents participated in the CLTS Program through varied meetings, trainings, and in the capacity of CLTS group members and leadership. While a few participated in the capacity of Committee Leader and Committee Members (11%) several others attended discussions and meetings (88%) while a modest number (29%) partook in the workshops and training organized under the program. Due to awareness initiatives undertaken by the program, a couple of respondents (12%) utilized the available government scheme to build toilets, and access improved standards of hygiene.

Figure 12:
CLTS
Intervention
Overview



A closer interaction with CLTS members, led to a more nuanced understanding of the Committee's operations, but also highlighted that the CLTS committee was not active at the time of study. It also brought to light discrepancies and presumable questions about the committee's current operations. While both members have been crucial to the committee and agreed that spreading awareness in the village was a primary focus of their role, inconsistencies were noted in their count of total members in the Committee, with each noting 50 and 14 members respectively. The two respondents further disagreed on if any households availed of government subsidies to build toilets. Unanimous agreement was reached on the lack of government schemes available to the committee. This ensuing contrast in the answers indicates a lapse in the community's current ability to interact and engage with its members.

There was limited engagement of community members with CLTS organised meetings and training sessions. Most respondents (44%) had only attended one meeting and discussion session, while a few others (31%) attended 2 meetings, a modest number (19%) attended 3 meetings. However, in a clear indication of a lack of interest or time, or perhaps both, only 1 respondent out of 16 attended 4 meetings. Similar, if not worse, attendance is viewed in the trainings and workshops conducted by the CLTS, with a large number of respondents (56%) having attended just one workshop. The percentage of attendees reduces as the number of workshops increases. 24% attended 2 workshops, while only 13% respondents were present for 3 workshops. As previously demonstrated only 1 respondent attended 4 workshops.

While the number of respondents attending discussions and workshops conducted by the CLTS leaves room for improvement, respondents displayed good recall of the topics that were discussed. According to respondents, meetings and discussions, training and workshops dealt with the same topics. These included community cleanliness (100%), toilet construction (87%), waste disposal (69%) and handwashing (69%).

Awareness regarding WASH activities was mainly credited to the Health Department, Panchayat, Omni Active, and Old Vision NGO. Most respondents indicated that the Gram panchayat which organized meetings and discussions related to the community were responsible for spreading awareness in the village.



AREAS OF IMPACT

While all respondents had a toilet in their house, only a few (12%) credited the CLTS program for its construction. One respondent revealed he had built the toilet on being informed of the existing government scheme through the Program, while the other admitted to having been convinced into building a toilet facility. Both availed of the Swachh Bharat Abhiyan scheme to build toilets. Some respondents (53%) stated that the construction of toilets had begun pre-2015, with the others indicating construction had taken place in the last years five years (47%).

Reports have indicated that while toilets have been constructed under the Swachh Bharat Mission, they have not been used for lack of adequate running water facilities. A positive majority of respondents indicated regular access to water. Respondents indicated regular access to tap water (53%), while some respondents said they stored water in buckets for later use (35%). Nevertheless, 12% respondents spoke of a lack of water sources and its ensuing complications. They further explained that while there was a water source, there was no running water, which hindered their ability to use the toilet. This indicates that the respondents should not only have access to toilets and but there is a need for running water to ensure they can engage in basic sanitation practices. For household use, the panchayat tank community water supply was used. The respondents further highlighted that lake water could have been a likely source of water, however it was contaminated with chemicals and dirt and was no longer usable.

Open defecation seems to still be prevalent in the village. Almost all respondents were clear on not practicing open defecation since the toilets had been constructed, but a group activity conducted among 8 respondents revealed different answers. These respondents revealed that a few people had access to toilets, while others practised open defecation. Caste based discrimination or violence was not noted as a factor in the differential access to toilets. Furthermore, there was no community toilet that everyone could use so people still resorted to open defecation.

The biggest problem for continued use of toilets appeared to be drainage. The respondents indicated overflowing septic tanks all over the village. When questioned on how waste was disposed, Gundlupet Corporation were cited as the main waste collectors. Some villagers were said to throw waste on the roadside, while others burned plastic. Further questions were asked to get a wholesome understanding of the familial setting of the respondents and their use of the toilets.

The program has instilled awareness on hygiene, leading to improved practices. Respondents mentioned improved practices among people in terms of using toilets and not resorting to open defecation (18%), cleaning toilets regularly (12%), using soap for handwashing and regularly washing hands (12%), wearing slippers (12%), etc. Most agreed that building of toilets has led to these improvements in the last few years. Improvements in hygienic practices were also visible among respondents who indicated they always boiled water (25%) and sometimes (62%). Water was always filtered via cloth filtration and stored in closed lid containers or pots with covered lids. Toilets were used and cleaned regularly, and the house was also cleaned every day. However, respondents brushed only once in the mornings, although they washed their hands with soap more than three times per day (62%) and two to three times per day (37%) Hands were washed when dirty, before eating and after using the toilet. Soap was used to remove dirt, spruce up personal appearance, to smell good and prevent diseases via microbes or bacteria. The only times respondents were unable to wash their hands was when there was no soap available.

In the last few years, most respondents appeared to have moved up the sanitation ladder⁸ from open defecation to a leach/ pit facility and septic tank while a minimal number have access to a Flush, pour facility. Additionally, they indicate knowledge and willingness to practice the hygiene practices the awareness programs dispensed through various topics. Respondents also spoke positively about the program, indicating that the awareness program had taught them basic hygiene practices. It is clear that the construction of a toilet has led to an improved sense of self and privacy among participants, and respondents credited the program with giving them awareness of the topic.

Even though very few toilets were built owing to the program, several benefits of having household toilets were outlined by respondents. Time saving (62%) was recorded as the biggest advantage of having a toilet. This was closely followed by a reduced risk of contracting viral infections (37%) and with the power to take initiative to maintain hygiene (31%). Saved from the humiliation of being spotted/ recognized followed on the list, with accessibility (25%) and safety and increased safety for women and children (25%) of the house

⁸JMP Sanitation Ladder Explanation



also being mentioned. A majority of respondents explained that the whole process of open defecation, from often having to walk a mile to relieving themselves, took a minimum of 30 minutes, with respondents noting it took over 40 minutes. As such, not having to walk so far meant respondents were able to save time and were then able to divert this time to other activities. Primary among them reaching the fields earlier and being able to invest longer hours at work. Women reported that children also reached school on time. The easy-round the clock accessibility hence was viewed as particularly convenient.

A common thread of the impacts of the construction of a toilet, appears to be in its reduction of vulnerabilities. Most respondents believed that the construction of a toilet had led to an increase in the privacy and safety experienced by women. Female respondents have also stated that it often was not safe for them to use the fields. One explanation for this was the proximity and visibility of defecation areas from the main road, and passing vehicles were viewed as a threat and source of humiliation. However, night-time was noted as particularly unsafe, and in order to avoid having to step outside to relieve themselves in the night, respondents often practiced self-imposed dietary restrictions. This included not eating and drinking in the evenings, so as to abstain from using toilets at night, and women specifically having to wake up much earlier in the mornings to use the toilet. Moreover, rains made the journey to open defecation areas all the more challenging. That they no longer had to walk so far was a benefit highlighted by many respondents. Overall, the construction of a toilet, led to women no longer having to restrict themselves, or worry about their safety while defecating.



Participatory activity being conducted with CLTS beneficiaries in Berambadi



Hand-washing FGD being conducted with students in Hongalli

There is no need to go outside anymore, and women are safe from animal attacks.

~ Female, 39 years, Berambadi



We don't need to need to worry about being spotted by moving vehicles when we go outside.

~ Female, 27 years, Berambadi



There are no restrictions anymore, women and children were very scared to go outside in the night earlier.

~ Male, 46 years, Berambadi



Many respondents explained that a toilet at home has reduced the spread of viral infections and diseases, as they now use their own toilets. Children and women are noted to have improved health, as both were viewed as more vulnerable to infections. Access to a household toilet helped women especially during menstruation, as they were free to use the toilet whenever they please. Moreover, elderly members of the family were also said to have benefited from not having to walk a great distance to relieve themselves.

The risk of contracting viral infections and diseases has reduced. These were common prior to constructing toilets at home.

~ Male, 43 years, Berambadi





As part of the OAHT's efforts to improve sanitation, toilets had been constructed for Anganwadis in Berambadi. The toilet in AW Kendra 1 was in a much better condition than the one in AW Kendra 2. In both toilets there were doors ensuring privacy, but there was a lack of an adequate flushing system. However, in AW Kendra 1 there was water available in buckets to use for flushing, which was not the case in AW Kendra 2. AW Kendra 1 had a drainage system, sufficient buckets for water storage and accessible disinfectants and cleaning supplies. AW Kendra 2 on the other hand no buckets, basins, taps or soap. Further interaction with respondents revealed, that the drum was broken, which was why there was no water available in the taps. However, an underground water storage facility existed a little away from the toilet, and as such, children and ASHA who needed to use the toilet, would carry this water with them and then use it. No disinfectant or cleaning supplies were visible in the toilet. The Anganwadi toilets, especially Kendra 2 highlights the importance of continued maintenance. While there is a toilet, the lack of water, has left the toilet semi-operational and only used when absolutely necessary as most students and teachers avoid using it.

Figure 13:
Status of
Anganwadi
Toilets

Anganwadi Kendra 1

- ▶ Well maintained and clean, sufficient buckets for water storage
- ▶ Water available with taps, but no basin or soaps
- ▶ Drainage was prevalent but no flushing system

Anganwadi Kendra 2

- ▶ Not well maintained or clean
- ▶ No drainage system or flushing system
- ▶ No water available since the storage drums had broken
- ▶ Not regularly used

SUSTAINABILITY OF IMPACTS

The program has led to an increase in awareness on sanitation and hygiene topics. However, poor infrastructure does not support sustained practices. Some villages are facing drainage problems for more than 6 months and have not been able to resolve the issue with the Panchayat. There are also shortages of drinking water in villages. An active CLTS which mobilises people to avail of improved infrastructure will serve as a crucial factor to ensure trainings and awareness translates into noticeable impacts on WASH infrastructure and practices among communities.



One of the many open drains that line the houses in Berambadi village



Anganwadi Kendra 1 Toilet in Berambadi



WATER PROVISION IN SCHOOLS

SCHOOLS AND RESPONDENT PROFILES

Three schools were visited of the 9 schools supported by the program.

Name of School	School Grades	Boys	Girls	Total
GHPS Baragi	1st - 7th	63	65	128
GHPS Chennamallipura	1st - 5th	15	15	30
GHPS Kannegala	1st - 5th	27	26	53

The water provision survey interviewed 2 female and 1 male principal, amounting to a total of 3 respondents. This was done to gauge the effectiveness of the RO plants installed in 2020. They represented schools of Baragi, Chennamallipura and Kannegala. The average age of the principals was 41 years old.

PROGRAM RELEVANCE AND COHERENCE

The availability of basic drinking water facilities is limited to only 69 percent of schools in India⁹. According to the Ministry of Education, around 42,000 schools in India don't have a drinking water facility. The provision of safe and adequate drinking water facilities in elementary schools is mandatory under the Right of Children to Free and Compulsory Education (RTE) Act, 2009. Despite this, many government schools do not have adequate infrastructure and resources to provide a stimulating learning environment to the children and are deprived of basic facilities for drinking water, sanitation, and hygiene.

The provision of water at schools is one of the highly effective practices in increasing access and learning outcomes. In addition to the necessity of water to maintain personal and environmental hygiene, reducing student dehydration in schools has been associated with improved cognitive abilities¹⁰. Having toilets and drinking water in schools are a basic necessity. The lack of these facilities can lead to students being irregular in schools and dropping out. A reverse osmosis (RO) system is one of the most extensive methods of filtration because it removes 98% of dissolved solids from the water. Waterborne diseases are a risk for young children. Having an RO water filter in schools significantly reduces this risk. It removes the contaminants from the water and also makes it better in taste.



Interactions with Community Members at Berambadi Village

⁹UNICEF and WHO, 2018

¹⁰Drinking water, sanitation and hygiene in schools: Global baseline report, UNICEF, 2018



OAHT's provision of RO water filters in schools is in line with the concerted efforts of the government and other organizations to improve access to drinking water in schools. India's Department of Drinking Water and Sanitation provides technical and financial assistance to the States to provide safe and adequate drinking water to rural India with focus on service delivery. It's centrally sponsored scheme, the Jal Jeevan Mission aims to provide safe and adequate drinking water through individual household tap connections by 2024 to all households in rural India. Several efforts are also being made by companies in India to make low-cost water purifiers to provide affordable and safe drinking water for millions. NGOs are also providing different filter water systems to schools, especially the ones located in rural areas.

IMPLEMENTATION EFFECTIVENESS AND FEEDBACK

As per principal interviews, it took approximately one year from identifying the need in schools to final provision of the RO plant. Schools were identified for support based on the need for provision of drinking water and local leader recommendations.

Out of the 3 RO water filters provided by OAHT, 2 were not functional at the time of the study. The principal in Chennamallipura also said that the RO filter would create a lot of noise when it operated which would disturb ongoing classes. The principal in Baragi didn't face any problems with the RO filter and said that the school really benefited from it.

The principals said that they did not know how to maintain it and the RO filters needed repair. They did not know who to reach out to as there were no numbers provided to them.

We were not given exact instructions on how to operate the RO filter. We also need to know who to contact in case we need to repair the RO filter.

~ Principal, Government Lower Primary School, Chennamallipura



AREAS OF IMPACT

All 3 principals who were interviewed said that they had been using water stored in tanks earlier which would be unclean and that would result in many students falling sick, and low attendance levels. Teachers and students had to carry heavy bottles from home because there was no clean source of water available in school. Currently, out of the 3 schools visited, only 1 still uses the RO filter while other 2 have gone back to using water directly stored in jars and drums. At least initially when the RO filter was installed, it did solve the problem and the school staff and students got access to clean drinking water.

Earlier we would store water in tanks and boil it for the students to drink. The water would still remain unclean, and the students would have multiple health issues.

~ Principal, Government Higher Primary School, Baragi



There were also cost benefits experienced by schools. For example, the school in Baragi earlier had to pay INR 20 everyday to get filter water canisters for students. After having the RO water filter installed, they could save up on that daily expenditure. Additional programs of hygiene and handwashing sessions in schools has helped spread awareness among the students about the importance of drinking clean water and maintaining sanitation.

SUSTAINABILITY OF IMPACTS

The program will only be sustainable if the RO water filters are maintained and serviced regularly. It is clear that just providing the schools with RO filters is not enough. Proper instructions also need to be given to the school staff on how to operate the filter.



An Interview with the Principal of a government school In Kannegala



An unoperational RO plant installed by OmniActive at Chennamallipura as is visible, it is being used to dry utensils.



HANDWASHING AWARENESS

RESPONDENT PROFILES

The handwashing survey interviewed 14 students (50% girls, 50% boys) and 2 school principals, amounting to a total of 16 respondents. The children were all primary school-aged students in the villages of Kannegela, Chenamallipura and Baragi. The two female principals were aged 39 and 49 each and had been serving as headmistresses in Baragi and Chenamallipura government school. Their career had spanned 2 and 14 years each.

PROGRAM RELEVANCE AND COHERENCE

Covid-19 has made the world realize the importance of maintaining cleanliness and hygiene. A survey done by the National Statistics Office (NSO) shows handwashing is not a habit that comes easily to most Indians. According to the survey, while most households in India wash their hands before meals, only about 36% use soap with water to do so. The instances of handwashing are even lower in rural areas. If children don't see handwashing being done at home, it is difficult for them to pick up such habits. A school is a great place for such behaviours to be taught at an early age so students can also propagate them at home and in the community.

Hand hygiene is the single most important effective thing one can do for good health and it plays a major role in safeguarding one against any form of infections.

~ Dr. Randeep Guleria, AIIMS Director



Adequate WASH facilities and the right hygiene behavioural practices in schools are also critical for the overall health and learning outcomes of students. Having access to clean toilets, drinking water, and handwashing facilities prevents several communicable diseases. In India, promoting handwashing practices is a simple and cost-effective intervention to reduce diseases and yet, it remains a challenge.

A study revealed that 1 in 5 government schools in Karnataka do not have handwashing facilities. Sometimes even if a handwashing facility is available, due to lack of awareness it is either not maintained or not used.

OAHT found that washing hands with soap wasn't a very prevalent practice in schools present in the villages under study, which encouraged them to begin the handwashing awareness program in schools. The handwashing program was conducted by OAHT in 7 government schools to make children understand the importance of handwashing and maintaining hygiene and spread further awareness among their families and the communities.



OAHT's handwashing workshops in schools contribute to the efforts being taken by the government and individual institutions. Few workshops had been undertaken in the schools to promote right sanitation and hygiene practices among students, organised by the State Education Department.

IMPLEMENTATION EFFECTIVENESS AND FEEDBACK

The workshops provided information on safety and hygiene measures to combat Covid-19, benefits of washing hands regularly, and handwashing techniques. 8 workshops were conducted in one school, while 4 workshops were conducted in the second school. About 128 students attended the workshop in the first school and 30 students in the second school. The principals said that topics like washing hands regularly with soap and water, using toilets to defecate, the importance of maintaining cleanliness and hygiene, and information on Covid-19 were given in the workshop.



Table 5:
Overview of
Handwashing
Program

	GHPS BARAGI	GLPS CHENNAMALLIPURA
	4 workshops 	8 workshops
	128 students 	30 students

The principals of the two schools visited provided very positive feedback on the program, especially the workshop content and demo-sessions. According to principals, the activities conducted were very engaging and the information given was very effective and in-depth. They felt that teaching topics related to sanitation and hygiene were even more critical at a time like Covid-19.

Children are following what they had learned during the workshops. OAHT trainers conducted very engaging activities and explained everything in an in-depth manner.

~ Principal, Government Higher Primary School, Baragi

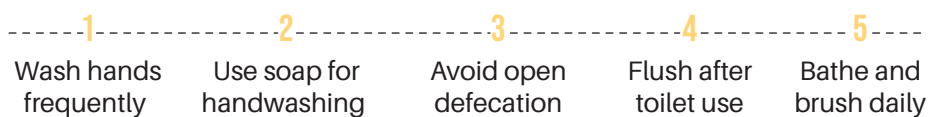


AREAS OF IMPACT

Most students remembered what they had learnt in the handwashing workshop. In one school, the students also demonstrated the steps to correctly wash hands. The students said that they learnt the importance of washing hands frequently (86%), using toilets (86%), using soap while washing hands (86%), flushing after use (86%), and brushing and having a bath daily (86%). Since the program also aimed to share good habits among the students’ families and communities, they were also taught how to share good hygiene practices with their family members (57%).

Figure 14:

Hygiene practice messages given at the workshop



Participatory exercises gauging students’ hygiene know-how and practices brought positive impacts to the fore. All the students in the group discussion agreed that habits like boiling water, cleaning toilets, using soap for washing hands and drinking filtered water are good. They were also aware that storing water in an open container, washing and taking a bath in unclean water, leaving food open, throwing garbage on the road and taking a bath in the open are bad. When students were asked what they should do to ensure that the drinking water is clean, all students in the group discussion said that they should use an RO filter. They also said that they drink boiled water at home which is stored in a covered container. To maintain good sanitation, the students said that toilets should be cleaned regularly and flushed after every use. They understood the importance of taking a bath daily and using soap to wash their hands. They also emphasized the importance of keeping their surroundings clean.

Through the OAHT handwashing program, the students have learnt the proper way of washing hands and understood the importance of it. We want to conduct more programs ourselves, but we are short-staffed. That’s why having OAHT around is a great help.

~ Principal, Government Higher Primary School, Baragi





Students were aware of general WASH practices but could not articulate why they should be followed in detail. They gave generic answers like toilets should be used to prevent infection and diseases. They did understand that boiling water and using soap to wash our hands kills the germs and saves us from diseases. When asked what diseases can be caused due to not using toilets or using unclean toilets, the most common responses were dengue, malaria, infections, stomach pain, and fever.

While students reported following hygiene practices, there could be some social desirability bias in responses. As per students, they followed basic sanitation and hygiene practices like not engaging in open defecation, brushing their teeth twice a day, bathing every day, and washing their hands with soap more than 3 times a day. They said that they usually washed their hands with soap before eating (100%), after using the toilet (71%), when they were dirty (64%), before going to sleep (26%), when returning to the household (26%), after waking up (7%) and before preparing food (7%). They washed their hands to remove dirt (86%), to kill bacteria (71%), for personal appearance and to look good (64%), and to make them smell good (26%). This indicates that most of them knew that using soap is important to remove germs and kill bacteria. The household toilets of the students are mostly cleaned daily (57%), and sometimes weekly (26%), once in 15 days (7%), or monthly (7%). They said that the area around their house is cleaned everyday which shows that their families are also fairly aware of the importance of maintaining hygiene.

Students are aware and have hygiene habits, but sometimes have resource constraints. The students said that if they can't wash their hands with soap is at times when there's no soap or if there's no water. Sometimes due to insufficient water they are not able to brush their teeth or bathe every day. Very few students said that they don't take a bath because of lack of bathing spaces.

Overall lack of WASH infrastructure was noted across the villages and schools. In the first school, both student toilets were functional while in the second school, only 1 out of 4 available toilets for students were functional. The other 3 toilets were broken and in need of repair, which brings light to the fact that despite having the toilet infrastructure, maintaining it is a challenge. Both the schools were equipped with basic WASH facilities and had water available for handwashing and flushing, buckets for storing water, soap available for washing hands and usable hand washing basins. In a group discussion with the students done across 3 schools, it was found that all the 3 schools had toilets, handwashing and drinking water facilities. However, the students in the Chennamallipura government school said that there were toilets, but they were unclean and stinking, and the RO plant filter was not working. All students carry their own water and use the water available in schools if that gets over. All students said that toilets should be cleaned daily, however it is not done in the schools.

SUSTAINABILITY OF IMPACTS

Interaction with the students showed that they remembered what was taught in the handwashing workshops and are currently following several WASH practices. The program is hence sustainable in terms of the intended impact. The students are also practicing sanitation and hygiene practices at home which shows they are promoting these habits within their families. While the students did suggest issues with toilets in schools, almost all said that toilets at home are cleaned every day. They also drink boiled or filtered water at home.



Children at Baragi School showcasing the five steps of hand-washing



Visit and Interactions with children in Kannegala



Participatory activities with students in Baragi



FARMER EDUCATION PROGRAM

FARMER PROFILES

17 males and 1 female respondent were interviewed for the Farmer Education Program. They were from the villages of Baragi, Berambadi, Chennamallipura and Hongalli each. The average age of the respondents was 55. Most farmers interviewed (61%) had pursued education till the 8th std, while just 1 had studied beyond the 12th grade which shows that the literacy levels among them were not very high. Very few respondents (22%) were part of a farmers group. One respondent was part of a farmer group that had begun in 2005, while one respondent was a member of a group initiated in 2018. Two respondents were members of a group that had begun in 2019.

The average size of land that a respondent owned was 4 acres. On average, a respondent cultivated on 3 acres of land and had 2 acres of irrigated area. The most common source of irrigation cited by most respondents was drip irrigation (43%), while other sources were streams, borewells and wells. Mixed cropping was the most common practice (44%), followed by monocropping (33%) and double cropping (22%).

On an average, a farmer cultivated 4 crops in a year. Most of the farmers cultivated crops in the summer (72%), while others couldn't because of no access to irrigation. They grew crops like horse gram, beetroot, cabbage, tomato, onion and others. All of them cultivated crops in the monsoon season and the most common crop was marigold. Other monsoon crops were cotton, turmeric, sunflower, etc. Some winter crops grown were onion, hyacinth bean, tomato and long beans. The average production of crops in a year was 7709 kgs. Most of the farmers use a combination of organic and non-organic fertilizers and pesticides (87%).

PROGRAM RELEVANCE AND COHERENCE

Agriculture is the largest source of livelihoods in India with 70% of rural households still depending on it for their livelihoods. Despite such heavy dependency, the agriculture sector faces several challenges and agriculture's contribution to the Gross Domestic Product (GDP) has been steadily declining. India's food security depends on agriculture to meet the demands of a growing population. This amplifies the need of an efficient, productive, competitive and sustainable agriculture sector.

There are several factors that lead to low productivity, high average cost, and low efficiency in Indian agriculture. Fertilizer use in most of states is sub optimal (Chand and Pavithra 2015), and farmers are realising the importance of a shift to organic fertilizers to make agriculture sustainable. More than one crop is grown on less than 50% of area under cultivation. Improved technology has not yet reached large number of farmers which is evident from the fact that more than 30% area under cereals is still under traditional varieties.



Farmers being interviewed in Berambadi and Hongalli

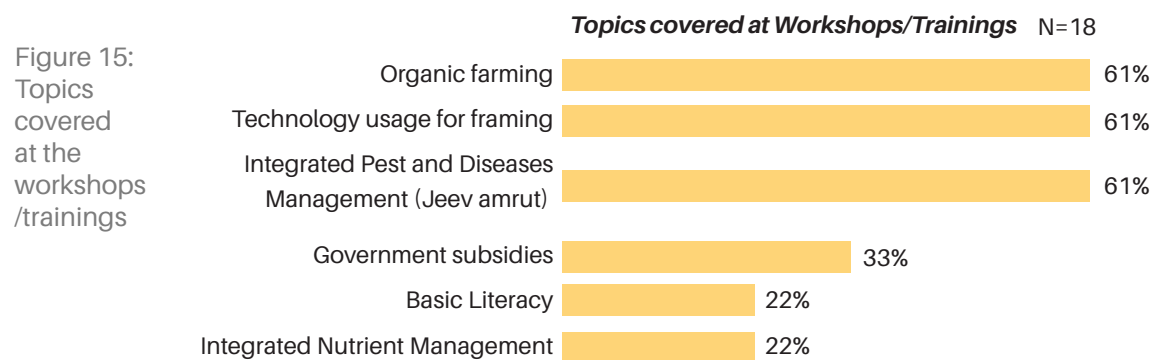


The farmer education program focused on improving financial literacy, sustainable agricultural practices and raised awareness about government schemes for farmers. Poor understanding of financial institutions and financial information prevent millions of rural households in the developing world from making informed financial decisions.

OAHT’s work in educating the farmers in Gundlupet is in tandem with the ongoing efforts in India. The government of India has come up with various schemes and programs for the welfare of farmers. Schemes like the Kisan Credit Card Scheme, Pradhan Mantri Fasal Bima Yojana (PMFBY) and National Agriculture Market (eNAM) are some of the schemes which have been very beneficial to farmers. Organisations like National Bank for Agriculture and Rural Development (NABARD) also have several financial inclusion initiatives to address regional inadequacies and to bring about inclusive and equitable financial inclusion across the country. It conducts financial and digital literacy camps, deploys micro ATMs, helps onboard farmers on UPI platforms.

IMPLEMENTATION EFFECTIVENESS AND FEEDBACK

All farmers were able to recollect what was taught to them at the training sessions. They learnt about integrated pest and diseases management (61%), technology usage for farming (61%) and organic farming (61%). They were informed about government subsidies, integrated nutrient management, and basic literacy in these sessions. A few farmers (23%) were given information regarding different government schemes related to crop subsidy, agriculture, borewell and benefits from the forest department. The training sessions also focused on digital and financial literacy.



Overall, the feedback on the sessions and benefits received under the farmer education program was favourable. Respondents said that they faced no challenges during the training program. The respondents who were provided with saplings through the KAPY scheme said that the saplings were of good quality. The 4 farmers who were members of a farmer group said that OAHT conducted trainings and discussions with them to give them agriculture related information on topics like the right usage of pesticides, organic fertilizers for farming, etc. Some said that these sessions happen once a year, while some said once a month and once in 3 months, which shows their understanding of the frequency of these sessions was different.

Few respondents (17%) received saplings like teak, neem, coconut, mango and bamboo through the KAPY scheme. Beneficiaries of the scheme said that the saplings were of good quality.

The OAHT comes to the field and explains the cultivation process from time to time. Other companies don't come to the fields and do not give us information like OAHT does.

~ Male, 33, Baragi





AREAS OF IMPACT

Many respondents (61%) received help from OAHT in availing of government schemes, as most of them were unaware about these schemes earlier. The most common schemes that the respondents were supported with included the Pradhan Mantri Kisan Yojana and subsidies related to crops. These schemes are very beneficial since all the beneficiaries interviewed depended mainly on agriculture as their source of income and were small or marginal farmers. OAHT had helped the respondents by providing the necessary information of the scheme, while some were helped with their application process. A couple of respondents were assisted with the paperwork or given help with tracking the status of their application. Of the respondents who availed benefits of government schemes, most of them received information about it through OAHT.

I learnt about coconut tree sapling subsidies through the program. The information was given in a clear and easy to understand way.

~ Male, 40 years, Berambadi



Saplings provided as part of the Krushi Aranya Protsahan Yojana (KAPY) government scheme were still surviving. Farmers had started harvesting of the crops and were selling produce in markets.

I have earned INR 30,000 after selling the mangoes and coconuts, which I cultivated after receiving the saplings through the KAPY scheme.

~ Male, 75 years, Berambadi



The program lead to an improvement in agricultural practices. Using jeev amruth, a natural liquid fertilizer made by mixing water, dung and urine from cows with some mud, is widely practiced. This enhances the fertility of the soil without destroying it with chemicals and is also cost effective. A few farmers attributed doing this to OAHT's training program. Pruning or snipping removes dead or dying parts of the crops and promotes healthy growth of the plants. All farmers practiced snipping and most of them also attributed it to OAHT. Almost none of the farmers undertook mulching on their fields (95%) which portrays that it is still not a very common practice among them.

Many respondents (61%) said that they learnt about organic fertilizers and pesticides through the program and have started using that on their fields. Other impacts that the respondents felt were that they learnt about modern agricultural practices like organic farming. They understood the right usage of fertilizers and pesticides. The program also made them aware of which crops to grow in which seasons.

Figure 16:
Program contribution to adoption of agricultural practices

	Total Farmers engaged with practice (N=18)	Total farmers adopting the practice owing to OAHT intervention (N=18)
Use of Jeev Amrut in Fields	72%	56%
Snipping practices	72%	44%
Use organic manures and chemical free pesticides	67%	44%

Financial inclusion of farmers showcased positive results, but use of digital tools among farmers was very limited. All respondents had a bank account and most of them used it regularly on a monthly basis (56%). They used it for making withdrawals (78%), receiving government funds (72%), savings (50%), and making payments (17%). Half the respondents also used the ATM machine. Digital literacy programs were not very effective since most of the respondents in the sample did not have a smartphone. Not many of them had smartphones so using the internet to acquire farming related information was not very common. Some of them used platforms like YouTube, Annadata app, and the Krishi Kisan app to get farming related information.



SUSTAINABILITY OF IMPACTS

To sustain impacts there is a need to provide further information about schemes and offer **handholding support**. Exposure visits and support to improve available agriculture infrastructure and machinery is essential. This includes fencing, spraying cans, sickles, etc. OAHT should use more audio-visual tools for training and awareness session delivery since a number of farmers are illiterate. Respondents also made suggestions of including topics of crops suited to local soil conditions (black soil), pricing and markets available for varied crops, available subsidies for farming inputs, crop specific sessions, season-appropriate plants that need to be grown, etc. in order to have continued positive impacts on agriculture.



A Marigold field in Hongalli



Farmer Interview in Berambadi

CONCLUSIONS AND RECOMMENDATIONS

All 6 programs currently being implemented by OAHT are relevant and important in their areas of focus.

Programs like the eye camp have been working well and can be continued as is, with some follow up camps. Handwashing program and farmer education program can be taken to a next stage where they focus on other specific interventions like a school WASH awareness program and a farmer government scheme linkage program respectively. The women nutrition program can be modified with some more detailed sessions with the women, and it can also get the families of these women in its ambit, to drive a bigger societal change around women's nutrition. The water provision program needs an overhaul with either better maintenance of the RO filters provided or a switch to providing low cost and low maintenance water purifiers.

EYE CAMPS

The eye camps have been a successful intervention with most respondents having benefitted from it. The average age of the respondents was 65 years, suggesting that the program was particularly beneficial for an older population. Seeing migration trends in the villages under study, mostly the elders of a family stayed back at home, and this is the population that has higher instances of eye issues. The eye camps are therefore an impactful intervention that needs to be continued. Recommendations for this intervention includes:

- ▶ **Suggestions to increase space at the eye camps** so more people can attend and be accommodated. This also holds significance in light of Covid-19 where social distancing is necessary, especially for the elderly who are more susceptible to the fatality of the diseases.

- ▶ **Youth volunteers could be recruited in order to reduce language barriers** faced by patients at the eye camps. This will also help to increase awareness on the different kind of eye ailments among youth and people of the village to ensure cases reach facilities in time.

- ▶ **Many times, follow up medications like eye drops or wearing of spectacles get discontinued by patients** owing to affordability and access in remote locations. Recurring camps which offer free medication must be a priority for sustained recovery among patients.

- ▶ **General health camps with specialists are a dire need in these communities**, especially catering to highly prevalent ailments like skin diseases, ENT, heart disorders, hypertension, diabetes and orthopaedic issues.

- ▶ **Follow-up camps should be undertaken.** Many respondents indicated they would like to see more camps being organized. Follow-up camps can be organized to ensure that the respondents who were treated in earlier camps have been taking adequate care.

- ▶ **Strengthen mobilization and awareness strategies.** Many villagers we interacted with appeared unaware of a camp having been conducted in the village while stating that they would be keen to attend. This indicates that the awareness regarding the camps can be improved, and increased resources must be invested to cover more ground. Since the beneficiaries include a more elderly population, simpler strategies like door-to-door awareness or through community members should be used.

NUTRITION PROGRAM

The nutrition program conducted did make the women more aware about anaemia and helped them get tested for its early treatment. However, it has been a while since the program was conducted and it was seen that the retention of women regarding the specifics taught in the program was reducing. Anaemia is a problem in the villages where the program is conducted hence it is important to be continued. Recommendations for this intervention includes:

- ▶ **There are several other persisting health issues faced by local communities and in this regard general health camps should be a focus as per women and the ASHA workers.** If people need consultations, they must go to Baragi for Primary Health care, where sometimes doctors may not be available. Alternatively, they need to visit Government hospitals in nearby towns or cities like Mysore, which is far and often unaffordable. Further most villagers are engaged in field work and are unable to travel or pay for healthcare in cities. Community health check-ups help to identify diseases and cure them at early stages.

- ▶ **Awareness on menstrual hygiene emerged as an important recommendation** since many girls do not have access to hygienic products or are unaware of the importance and practices they should adopt. Several girls also get married very early and are unaware of birth control and contraception. There are also quite a few cases of urinary tract infections which should be addressed.

- ▶ **Nutrition support and awareness sessions need to consider local needs and realities.** For example, the main reason for poor diets is long hours of working in fields and sessions should be organised on carrying lunches or food to fields. Moreover, PHCs do not provide adequate care or enough treatment options, so it's important to work closely on improving facilities and service offerings at the PHCs.

- ▶ **Regular revision sessions can be held with the women** to ensure that the awareness received is sustained and women consistently follow the healthy habits taught in the program.

- ▶ **Tackle social stigmas through sessions with families of the women.** According to the ASHA workers not all women are eating 3 meals a day or getting nutritious food. Just holding sessions with women may not be enough to tackle societal constraints. The ASHA workers or Aanganwadi workers can have one-on-one conversations with the family members of the women participants to give them information on anaemia and the importance of a nutritious diet for the women.

COMMUNITY-LED TOTAL SANITATION PROGRAM

Most of the respondents in Berambadi attended the CLTS meetings and discussions and agreed on having received awareness about sanitation and hygiene through OAHT. Yet, through the group discussion with the respondents, it was found that open defecation is still prevalent in the village. The respondents helped point out roads on a map that are common spots for open defecation. This suggests that while the program has been effective in spreading awareness, with most respondents now having a toilet at home, the program still needs to be strengthened to make Berambadi ODF. Recommendations for this intervention includes:

- ▶ **Incentivize using toilets.** Despite attending CLTS sessions, there are villagers who still resort to defecating in the open. Families where all members only use toilets and have transitioned away from open defecation can be applauded in CLTS meetings. In the interviews, it was also seen that the respondents did not know detailed health problems that could be a result of defecating in the open. Emphasizing the severity of health issues that could arise due to open defecation in the sessions can further increase instances of villagers using toilets and keeping them clean.

- ▶ **Strengthen the functioning of the CLTS committee.** Only 2 out of 18 respondents mentioned that they were either members or leaders of a CLTS committee. The other respondents were either not a part of the committee or were not aware that it exists. Becoming a committee member can make villagers more involved in the discussions around sanitation, leading them to be more proactive about ending open defecation. A membership drive can be conducted to onboard members in the CLTS committee with fixed roles and responsibilities.

- ▶ **Ameliorate drainage facilities.** Informal conversations with the respondents revealed that more than the lack of basic sanitation practices, a major problem plaguing Berambadi appeared to be the lack of drainage facilities. Open and often clogged drains line multiple houses and are visible all over the village, thus leaving multiple villagers, especially children at an increased risk of contracting diseases. The necessity of a good drainage system in the village is visible both to its inhabitants and external observers alike. Building a better drainage system can be worked on with the support of the gram panchayat as they have allocated funds for it. Joint meetings can be conducted with the gram panchayat and zila parishad officers to construct drainage facilities on a priority basis.

- ▶ **Provide a point of contact for reparation of sanitation facilities.** One observation made repeatedly, was the lack of knowledge on the part of respondents on points of contact following a breakdown of sanitation facilities. They had no idea who to inform about the broken drum, or broken toilets, how to get it fixed so they could use the toilets again. They had simply abandoned it. Information on who to contact when facilities break down should also be given post construction, so beneficiaries can maintain the facilities they have been provided with.
-
- ▶ **Build community toilets.** Since many times toilet to person ratios in households are high and a lack of infrastructure restricts people from using household toilets. Community members suggested mobilising funds to build community toilets.

HANDWASHING AWARENESS

The handwashing awareness program has been very effective, especially since its importance has increased in the light of the Covid-19 pandemic. Most of the students who were interacted with, remembered what was taught in the workshops and followed basic sanitation and hygiene practices. The handwashing program can now be modified and grown into a school WASH awareness program. Recommendations for this intervention includes:

- ▶ **Conduct sessions with school staff.** In one school that was visited, only 1 out of 4 toilets were functional, others were broken. Students in all the 3 schools said that school toilets are not regularly cleaned. Awareness sessions should be held with the school staff to ensure cleanliness is taken care of in the school toilets as well as surroundings. School funds can be allocated to hire a local cleaner to maintain cleanliness in the school.
-
- ▶ **Follow-up sessions can be arranged with students.** The students followed some basic wash practices but couldn't explain in detail why they should be followed. This is important if they are to promote such healthy practices to their family or community. Follow up workshops can be conducted with students to explain to them the importance of WASH practices better. They can also be taught how exactly to encourage others in their community to follow sanitation and hygiene practices.
-
- ▶ **Link schools to government schemes.** Schools can be assisted in availing government schemes like Swachh Bharat: Swachh Vidyalaya initiative to construct/repair toilets. The schemes helps in the construction/re-construction of toilets in government schools.

WATER PROVISION

The water provision program is important since the principals of the school did complain about the direct water source being unclean. Getting access to clean drinking water is a basic necessity of school children. The program however, will only be successful if the water filters given are serviced regularly or schools are provided with other low maintenance options.

- ▶ **Keep a check on the functionality of RO filters.** Conduct a regular check of all the RO water filters provided to know which ones still operate and find out the reasons for not operating if any.
-
- ▶ **Provide a helpline number.** All 3 principals said that when there's an issue with the RO filter, they don't know who to reach out to. Provide a helpline number or a point of contact that the school staff can contact in case of any problems with the RO filter. Explain some basic maintenance practices to the school staff to fix small problems in the RO filter.
-
- ▶ **Use alternative models of water filters.** There are several companies manufacturing low cost and low maintenance water filters which can be provided to these schools. The Tata Swach Tech Jal unit is easy to install, operate, does not require electricity and operates on a very low maintenance cost. It has capacity from 100 liters per hour to 2000 liters per hour and can purify water from any source e.g. ground water, lake, municipal water, well, pond, canal, borewell and provide output drinking water quality. The Nazava water filter is another option which can filter tap, well, and rainwater so it becomes safe to drink. Because the filter systems are gravity-powered they do not use electricity or other fuels.

FARMER EDUCATION PROGRAM

Given that majority of the population in the villages is dependent on agriculture, the farmer education program is an essential intervention. Many farmers could be seen shifting to organic fertilizers and pesticides, but they had not entirely left inorganic farming. Providing them education and awareness is the first step, farmers also need to be linked to beneficial government and financial schemes as a next step.

- ▶ **Access to organic farming to be improved.** Better organic fertilizer and pesticide options can be presented to farmers. Government schemes providing vermicompost beds can be used to promote vermicomposting. Under the Mission for Integrated Development of Horticulture, financial assistance is provided for setting up vermicompost units at 50% of the cost subject to a maximum of INR 30,000 per beneficiary. Even organisations like NABARD are helping farmers switch to organic farming.

- ▶ **Promote mulching.** Mulching is an important practice to conserve soil moisture, prevent soil erosion, enhance soil nutrients, protect from pests, etc. Currently almost none of the farmers practice it. This can be focussed on in the farmer education sessions and farmers can be assisted to start practicing mulching on their fields.

- ▶ **Conduct more regular meetings with innovative topics.** Some farmers suggested that more regular meetings should be conducted to communicate agricultural schemes or other important information. Some also said that they already knew about topics that were taught in the trainings and wanted to know more about more innovative things in agriculture.

OVERALL RECOMMENDATION

Adopt a data-centric approach to implementing, managing and monitoring the program. There is tremendous scope to digitize the program. There is a need to invest in developing a data system with the beneficiary details and map each intervention with them. The following steps can be followed:

- ▶ **Baseline profiling:**
Collect basic demographic details of the beneficiaries to maintain a record. Assign Unique Identification Numbers (UID) to them, which will help with tracking.

- ▶ **Monitoring templates:**
Create monitoring templates for each intervention and to keep a check on the activities being done with each beneficiary.

- ▶ **Digitise:**
These templates can be digitised onto software like SurveyCTO, Google forms, etc to ease data collection and analysis.

- ▶ **Train:**
Train team members who will be involved in data collection to use these digital templates and collect accurate data.

ANNEX

Annex 1: Sample Distribution across Programs and Villages

Village	Eye camp	CLTS	Handwashing awareness	Water provision	Nutrition program	Farmer education program	Total
Hongalli	8	0	0	0	16	10	34
Berambadi	5	25	0	0	1	1	32
Chenamalipura	5	0	5	1	7	6	24
Baragi	6	0	5	1	1	1	14
Kannegela	6	0	6	1	0	0	13
Alathur	9	0	0	0	0	0	9



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