



BUILDING A BRIGHTER TOMORROW

Annual CSR Report 2017

TABLE OF CONTENTS

Key Messages

About LTTS and CSR Report	3
Message from the CEO & MD	4
Message from the Senior Leaders	5

About

LTTS' Commitment towards CSR	9
CSR and Our Business	10
LTTS CSR Policy	10
CSR Focus Area	12
Projects and Locations	14
Global Goals and Progress in 2016-17	15

Project Details

Skill Development	16
Education	35
Health	44
Innovation and Technology	52
Water	57
Environment	63
Corporate Volunteering Program (CVP)	67
Project Spend for FY 2016-17	70
Participation from the Leadership Team	71

CSR



ABOUT LTTS

L&T Technology Services Limited (LTTS) is a subsidiary of Larsen & Toubro with a focus on engineering R&D services. Our customers include a large number of global Fortune 500 companies. We offer design and development solutions across the entire product development chain in multiple industries such as Industrial Products, Medical Devices, Transportation, Telecom & Hi-tech Semiconductors and the Process Industry. Our core expertise lies in the areas of Mechanical Engineering Services, Embedded Systems & Applications, Engineering Process Services, Product Lifecycle Management, Engineering Analytics, Power Electronics and Machine-to-Machine and the Internet-of-Things (IoT).

ENGINEERING THE CHANGE

CSR REPORT

L&T Technology Services Limited fosters a culture of caring, trust and continuous learning. As part of our social responsibility, we contribute toward inclusive growth by empowering communities and accelerating development. Our social initiatives address community needs by building infrastructure and driving sustainability programs in the areas of health, education, environment, water conservation and community development.

The Company's CSR Policy framework details the mechanisms for undertaking various programs in accordance with section 135 of the Companies Act 2013 and the Companies (Corporate Social Responsibility Policy) Rules, 2014.

CEO & MD

Dr. Keshab Panda

At LTTS, we believe that the full measure of growth, success and progress is best reflected in the difference that we make to the lives of people.

Our 'CSR' initiatives are driven by a dedicated group of employees, who gain as much value from this engagement as the recipients.

Since 2015, LTTS has partnered with educational institutions, government agencies and NGOs to implement CSR projects in the areas of innovation and technology, skill development, education, health, environment, water conservation and community development. In the fiscal year 2016-17, educational support was provided to eleven municipal schools in Mumbai and Vadodara for the setting up science labs. 11,063 children and 80 school teachers benefited from this program. We trained over 1480 people through the skill development program.

"NAYA SAVERA"

458 BPL (Below Poverty Line) patients from remote villages of Andhra Pradesh and Tamil Nadu were provided free spectacles post their cataract surgery.
2000 families with 1300 hectares of cultivable land will benefit from our watershed project which is slated to be completed by 2019.
58 families in a remote tribal village of Mysore will benefit from solar powered electricity through our water and environment conservation projects. A five-year partnership is signed with Indian Institute of Technology (IIT Madras) to harness innovation and technology from within the community.

400 LTTS employees across different locations contributed to 1200 volunteering hours which touched the lives of 1500 underprivileged people.

While the focus of CSR efforts will be in the areas mentioned above, LTTS may also undertake projects that require special societal attention or in response to emergencies/ natural disasters.



SENIOR LEADERS SPEAK



Bhupendra Bhate

Chief Operating Officer Whole-time Director

I was delighted to participate in the skill development certification activity. The response we received from the beneficiaries was overwhelming. They literally broke down when we handed them their certificates and voraciously expressed their gratitude to LTTS for earning a place in the society.

I feel very proud of the great impact created by the LTTS CSR initiatives and look forward to playing a greater role in the future.



Paneesh Rao

Chief Human Resources Officer & CSR Head

Over the past few years, an increasing number of companies worldwide have begun promoting their CSR strategies. This is because their customers, the public and the investor community expect them to contribute toward the betterment of society. In most cases CSR is a result of various social, economic and environmental responsibilities. The term "CSR" is imprecise and its application differs. CSR refers not only to the compliance of human rights standards, labor laws and social security arrangements, but also to the fight against climate change, sustainable management of natural resources, consumer protection, philanthropy and volunteering. In recent years, CSR has become a fundamental business practice and has gained much attention from the management of mid and large sized companies. Companies understand that a strong CSR program is a key pillar to building good business practices. The impact that a company has on the society and the environment directly impacts its relationship with investors, employees and customers.

When companies assess their brand value from the context of globalization, they become increasingly aware that corporate social responsibility can be of direct economic value. Though the prime goal of an organization is to generate profits, CSR can be looked at as a strategic investment to give back to the society and the environment.

Research indicates that companies with a proficient CSR track record perform better and achieve larger growth. CSR programs influence customer purchasing decisions and also augment the way an organization is perceived by investors and prospective employees.

A major challenge for companies is attracting and retaining skilled workforce. CSR programs are a great way to engage employees in causes they are passionate about – such as skill development, health, safety and managing change.



SENIOR LEADERS SPEAK



<mark>P</mark> Ramakrishnan

Chief Financial Officer

As a part of our CSR initiatives, LTTS has decided to pursue initiatives in technical education / skill building and development, implementation of renewable energy systems, and scientific water management. This is being carried out in localities close to our offices and in tribal areas around Mumbai. Many of these initiatives are championed by our employees who dedicate their weekends for social change.

The Company has also tied up with reputed agencies to assist in these CSR programs. Our activities are monitored and presented to the CSR and Audit Committee bi-annually.



Manivannan GB

Principal Technology Leader

CSR is a vital part of LTTS' push toward building an inclusive and equitable society. We are especially committed to impacting workers in the unorganized sector. Interacting with different communities has taught us some very valuable business lessons.

Our core philosophy is that business as well as social responsibilities should go hand-in-hand and we should together strive for inclusive growth by empowering communities including accelerating development that is directly relevant to them.

Being a construction major, our parent company, L&T, has pioneered community development through CSR initiatives. Livelihood enablement has always been a focal point for all our endeavors. Our top leadership is committed to improving the lives of the workers in a holistic manner that includes education, re-skilling, health, and safety.





Divya Bhatt

Head, Plant Engineering Sales Eurasia

Our CSR initiatives bring employees closer to the society.

We derived pleasure from our recent contribution to a skill training program, 'Naya Savera' which saw 80% of participants in the first batch receive employment offers. This is a great way to build links to our community and create value for both the organization as well as the society. Another significant contribution is the establishment of 'Mini Science Centers' with the intent to nurture young minds. These models have been installed in five schools and help students visualize science concepts. LTTS' aim is to contribute toward nation building and nurture the inventors as well as scientists of tomorrow. I have a strong emotional connect to these initiatives and am glad that we are making a difference.

SureshBabu Raja

Global Head Mechanical Horizontal



During a recent visit to Vadodara , I had the opportunity to participate in a LTTS CSR Initiative on Science Labs and Skill Development. It was an extremely humbling experience. What struck me most about the young participants was the eagerness to learn new skills and enhance their standard of living by contributing to society.

These initiatives have a cascading effect – the young minds we touch will, in turn, heavily contribute toward the betterment of their communities and cause larger social upliftment. Each person we nurture will act as brand ambassador of LTTS by expanding the work on nation building. I am delighted to be a part of LTTS' CSR program.





Arul Selvan

Program Manager, Mechanical Design Services

I was thrilled to be a part of the valedictory function of a cataract eye surgery camp organized by LTTS. The expressions of the beneficiaries when they saw the world with their renewed eyes was priceless. I sincerely thank LTTS for giving me the opportunity to interact with the beneficiaries. These interactions have inspired me to continue supporting CSR activities.

Ripu Daman Singh



Head, Procurement & Facilities

An excellent initiative was undertaken in Vadodara for skilling differently abled persons and creating job opportunities for them.

- 80% of participants from the first batch have been gainfully employed.
- The initiative has helped LTTS build its own image in and around Vadodara
- The program was well appreciated by the Heads of several IT & BPO organizations.
- The present curriculum can be augmented with an English training course to create job opportunities in BPO companies.

It was amazing to witness the joy, passion and dedication of our CSR team. I congratulate the CSR team for this accomplishment and look forward to bigger things in the future.



Seema Ghanekar

Business Head, Media and Communications

It has been an exciting experience to get involved and contribute to CSR activities through the LTTS CSR initiatives.

Couple of events which I clearly recall are:

(a) the students' enthusiasm and eagerness to learn during Mini Science Lab at Navi Mumbai Municipal schools

(b) Enthusiasm demonstrated by children & ladies staying in slum areas to learn about computers at Mankhurd skill development centre.

Self Confidence and commitment shown by community people was an eye opener and I am confident that these CSR activities will contribute to overall development of the society.



CORE AREAS OF CSR STRATEGY FOR LTTS

L&T Technology Services Limited (LTTS) is committed to improving the lives of communities living in the vicinity of our operational centers. We assist these communities by creating sustainable livelihood, opportunities and empowerment initiatives.

We focus on five core areas for our CSR initiatives. These include water, education, health, skill development and technological innovations. In the areas of education and skill development, we support a wide range of activities aimed at making students employable with the right skills, abilities and knowledge.

LTTS CSR PHILOSOPHY

L&T Technology Services Limited (LTTS) fosters a culture of caring, trust and continuous learning. As a part of our social responsibility, we contribute toward inclusive growth by empowering communities and accelerating development. Our social initiatives address community needs by building infrastructure and driving sustainability programs in the areas of health, education, environment, water conservation and community development.

The Company's CSR Policy framework details the mechanisms for undertaking various programs in accordance with section 135 of the Companies Act 2013 and the Companies (Corporate Social Responsibility Policy) Rules, 2014.

CSR AND OUR BUSINESS

As a responsible Corporate Citizen, the Company contributes towards inclusive growth by empowering communities and accelerating development. We will leverage our inherent strengths and capabilities to build India's social infrastructure.

To this end, we shall:

• Implement sustainable CSR programs towards building India's Social infrastructure

• Partner with communities, NGOs and institutions to create a positive impact in areas of water & sanitation, education, health and skill development

• Harness technological innovations to address social needs

• Strengthen systems and processes to achieve measurable results.

Our aim and effort is to contribute to a better quality of life, mitigate social inequities, and help individuals in underprivileged communities to achieve their true potential.

LTTS CSR POLICY

The Board of Directors of the Company will:

- Approve the CSR Policy of the Company
- Ensure spend of at least 2% of average profit during the three preceding financial years
- Disclose the content of the CSR Policy in its report and showcase the Policy on the company's website as prescribed under Section 135 of the Companies Act 2013, read with the Companies (Corporate Social Responsibility Policy) Rules, 2014
- Ensure that all social programs/ projects undertaken are aligned to the CSR Policy of the Company
- Specify reasons in its report for not spending the earmarked amount in case the Company fails to make the necessary CSR investments.



The Board has formed the CSR Committee in accordance with the requirements of the Act.

Responsibilites of the CSR Committee:

- Formulate and recommend the CSR Policy to the Board for approval
- Monitor the Policy from time to time
- Recommend the projects / programs to be undertaken with detailed justification
- Evaluate and constitute a transparent monitoring mechanism for ensuring implementation of the CSR program
- Facilitate effective implementation of CSR policy

• Periodically review the CSR policy, implementation of various programs, and the actual impact on community development.

CSR PROGRAM

CSR Programs will be undertaken by the Company in identified areas. The Company will undertake need assessments as and when required. The Company will undertake its CSR activities either directly as projects / programs/ activities or through a Registered Trust or by making contributions to the CSR team of the holding Company. The time period/duration for a particular program will depend on its nature, extent of coverage and the intended impact of the program. The Company may enter into partnerships with the government, business partners and communities to create a multiplier effect of its social programs. The Company may use the services of internal teams, employee volunteers, expert agencies, and consultancy firms for conducting base line surveys, impact assessment surveys and guidance on program design and implementation.

CSR MONITORING AND REPORTING FRAMEWORK

The Company has constituted a mechanism to monitor and report the progress of its CSR programs at various locations. CSR Teams will be responsible for monitoring and implementing the CSR programs. The CSR Team will:

• Review the projects, analyze their utility and efficacy, and suggest suitable modifications in line with the CSR policy.

- In case the Projects / Programs are to be executed through partners, the CSR Team will verify and establish the credibility of such partners.
- Ensure compliance of the Rules / Regulations / Law by the partnering agency. Conduct quarterly, half yearly and annual audits of the partnering agency.
- Ensure that the partnering agency submits periodic reports to our CSR Team on the operational status
- Conduct CSR audits once in a year and report discrepancies, if any, to the CSR Committee.
- Conduct mid-course reviews and recommend modifications if warranted.



CSR THEMES



SKILL DEVELOPMENT

Government-sponsored programs are estimated to train just three million out of the twelve million people entering the workforce every year. The total workforce in the country is estimated at 487.4 million of which -

- About 93% of workers are in the informal sector, which is transient in nature
- 51% are in the non-farm sector.

 LTTS, being in knowledge industry domain, considers this as a key focus area for its CSR initiatives. We aim to create a skilled workforce of 5000 people over the next three years.

EDUCATION Maya Cavera 臣

Provide technical & engineering knowledge and enhance the technical know-how of students. Support differently abled students by providing IT Skills for specific programs.

- Vocational training to women and differently abled people to make them employable.
- Monetary contribution to academic institutions for providing technical and engineering training.

INNOVATION AND TECHNOLOGY: TECH UDAAN

Harnessing technological innovations to address the social needs of Water, Energy, Education, Health and Skill Development.

Provide funding support for technology incubation projects in leading institutes such as the IITs and other technological institutions.

(200) **HEALTHCARE: SPARSH**

 Support the setting up of community health centers, mobile medical vans, general and specialized health camps, outreach programs, centers for the elderly and the disabled.

Provide medical equipment and technological gadgets to the physically challenged.



WATER: ENWA

- Support programs that make clean drinking water available.
- Conservation and purification of water.
- Support new technologies for water conservation

ENVIRONMENT: ENWA (\mathfrak{t})

- Support Renewable energy projects
- Provide Solar electrification to the rural community

13

PROJECTS AND LOCATIONS

VADODARA

Skill Development and Education

MUMBAI & PUNE

Skill Development, Education and Water

BENGALURU & MYSORE

Skill Development and Environment

HYDERABAD

Education

CHENNAI

Skill Development, Health, Innovation & Technology

PROJECTS PARTNERS





CSR



GLOBAL GOALS



LTTS' APPROACH TO REACH GLOBAL GOALS IN 2016-17

3	HEALTH	During the year, a total of 3200 people were screened and cataract surgeries for 458 people were conducted of which 218 were males, and 240 female .
4	EDUCATION	In skill development program, various courses in beauty & hair care, electrical & home appliance, automobile repair, leather stitching & basic computer were conducted. A total of 1369 candidates enrolled for these courses, out of which 1148 got certified and 694 candidates secured employment. Also, the Mini Science lab installed in 11 Government schools in Mumbai and Vadodara benefited 10610 children and 80 teachers.
6	WATER	The watershed project will enable over 2000 people from drought-affected villages to access water. More than 2000 hectares of land will be treated under this project which will increase the area under cultivation by 20-25% and agriculture crop yield by 25 - 30% by the year 2019 .
9	INNOVATION	Our Partnership with IIT Madras for developing assistive technology solutions will help in providing access to education, communication, employment, daily living, recreation and rehabilitation for the differently abled people.
11	SUSTAINABLE CITIES AND COMMUNITIES	Our work on developing better, more efficient traffic signals in partnership with IIT Madras will benefit all modes of transport & motor vehicle users including pedestrians.
13	CLIMATE ACTION	LTTS provided electricity to 58 tribal houses of Below Poverty Line (BPL) category. A model of community managed sustainable source of energy was demonstrated in a tribal village and also the infrastructure of few Anganwadi, Government schools and community halls were upgraded to utilize solar power.





BACKGROUND

India, currently one of the youngest nations in the world with more than half the population below the age of 25 years is facing an acute challenge of skilled and trained manpower. The Skill India Mission launched by the Indian Government earlier this year aims to train 550 million people by 2022. Extensive surveys conducted by various agencies have identified the lack of vocational training for informal sector as a key factor. Perceiving these facts, it becomes essential for a company like ours which is functioning in the knowledge industry domain to invest in CSR and develop a skilled workforce in the coming years.



INTRODUCTION

L&T Technology Services being a responsible corporate citizen is taking continuous initiatives in the field of vocational training and skill development. The company has initiated several skill development projects to empower men and women coming from economically weaker sections of the society making a significant contribution to the Skill India Mission.

LOCATION

Chennai, Bengaluru and Mumbai



OBJECTIVE

To empower 5000 underprivileged individuals by providing Sustainable Livelihood through trade based training, along with certification from reputed Government Institute **National Skill Development Corporation (NSDC)** by 2020.

LOCATION: Chennai, Bengaluru and Mumbai

PROJECT IMPLEMENTING PARTNERS



Arch Social Consultants







Aarambh





IMPLEMENTATION PROCESS

Situation analysis before the project

The project team conducted a market assessment study along with the PIP to understand the skill development needs and aspirations of the people residing in the location. People residing in the rural and suburban areas were given the first priority. Community meeting and interaction with various community groups are conducted before the establishment of Skill Development Center (SDC).

ANALYSIS FOR THE PROJECT

The assessment of training needs is conducted to understand the skill requirements of the youth in the area.

The methodology used and applied in need assessment included the Participatory Rural Appraisal (PRA) methods and other data collection tools.

STAKEHOLDER ANALYSIS

Primary Stakeholders

- Unemployed youth
- Underemployed youth

"Primary Stakeholders are the target groups directly involved in the implementation of project activities"

Secondary Stakeholders

- Trainers
- Government institutions
- Government school and colleges
- SHG Groups
- Local micro finance institutions
- Corporates
- LabourNet team

"All the secondary stakeholders are identified to ensure successful mobilization and placements"

Tertiary Stakeholders

L&T Technology Services Ltd CSR team and LTTS Management





COURSES AT SDC



Beauty and Hair Care





Leather Stitching





Automobile Repair







COURSES AT SDC







Basic Computer





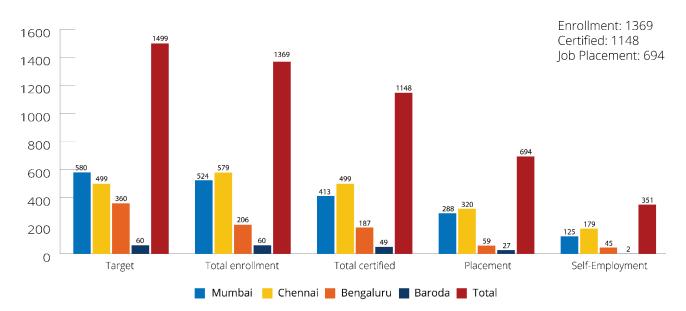
Electrical and Home Appliance







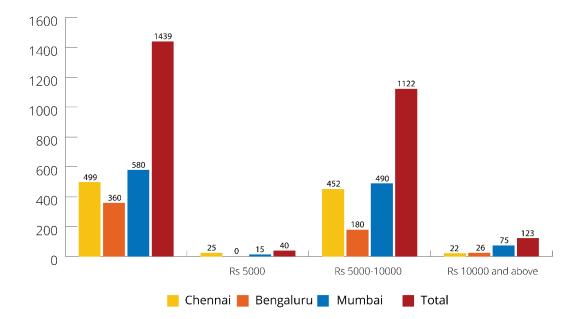
MILESTONES AT SDC: CHENNAI, BENGALURU AND MUMBAI



Skill Development Centers - Milestones FY (2016-17)

Note: Total 206 candidates were enrolled at Bengaluru centre against the target 360 as the centre started in November, 2016

Candidate's Family Monthly Income: Chennai, Bengaluru and Mumbai







TRAINING PROCESS

- Identify sources of potential candidates
- Mobilize candidates from local community
- Counselling
- Registration
- Conduct baseline survey and assessment
- Create customized curriculum
- Recruit and orient trainers on learning outcomes and pedagogy
- Training the candidates
- Continuous formative assessment
- Feedback and certification
- Placement

Step 1: Mobilization of candidates from the local community

The candidates mobilized are:

- Basically from economically weaker section of society who dropped out of schools due to various reasons
- Team visits schools and colleges for getting dropout list
- Team also works with Self Help Groups (SHGs) to identify candidates and know the student's background
- Informal meeting and group discussion is conducted with the local community

Step 2: Selection of candidates followed by registration process

- Selection is based on skill, qualification, experience and attitude
- · Candidates qualifying the minimum requirement are shortlisted and enrolled for the training

Step 3: Create curriculum, content and plan resources

Following process is undertaken to develop curriculum and plan resources

- Finalize the content based on the learning outcomes
- Design the assessment module linked to the learning outcomes of the program
- Identify trainers and on-board them
- Trainers for each trade are identified based on skills and experience required
- Background check of the trainers is conducted





Step 4: Collection of baseline information

Baseline information with respect to candidates' family background, educational qualification, experience, expectation from the training, assessment of current knowledge with respect to courses etc. is collected to assess the post training impact.

Step 5: Formative and summative assessment

Throughout the training regular assessment of performance and learning outcomes were conducted to understand the effectiveness of the training. Post training completion, a final assessment was conducted to assess the improvement in learning outcomes.

Step 6: Certification

All the candidates who qualify for the final assessment are provided with certificate from National Skill Development Corporation (NSDC), GOI which the candidate can showcase to avail or apply for any job opportunity.

Step 7: Placement drive and monitoring post placement

While the training delivery team focuses on delivering quality training, the placement team
ensures that they can tap the current demand in the nearby location which can provide
employment opportunities to the candidates once they complete the training.
Following strategy is followed for driving placement -
A Placement officer is assigned for the training center to meet the candidates during
mobilization/induction and discuss about placement and livelihood
The team meets each candidate and understands their knowledge about the trade and
expectation during training
 The team visits the center to motivate the candidates and share details about companies
·
they are going to be placed, benefit of the job, salary & growth structure
• Market mapping is done right from the start of the batch to build rapport with the client
Candidates are assisted to prepare CVs/ grooming skill with intervention of the trainers
Call the employer for guest lecture (for local placements only)
Share candidates' profile with the client couple of weeks before the job drive
Arrange for placement drive during the last week of training
 For outstation clients, interviews are usually done on Skype
Collect acknowledgment e-mail/LOI from the client on offers
• Share it with candidates and guardians on certification day before the candidates migrate
Help the candidate book tickets and guide them from location to employment
Provide hand holding in the location the candidate is going for joining
 Help the candidate with joining formalities
Local SPOC tries to visit the candidates once in 15 days to understand their issues

- Center team also stays in touch with the candidates
- Placement officer interacts with client to understand the candidates' performance/growth





Sample Certificate

Training Completion Certificate

This is to certify that _____

has successfully completed 120 hours of Automotive Service Technician

M Karthikeyan

training program with A grade conducted by LabourNet Services India Pvt. Ltd. in

association with L&T Technology Services under its CSR project "Naya Savera".

This program was held from 15-Jun-16 to 15-Aug-16 at Chennai

Dr. Gayathri Vasudevan Olief Executive Officer abourNet Services India Pvt. Ltd.







1anivannan GB

all Technology Leader

LAT Technology Services





PLACEMENT BY COMPANIES



SELF-EMPLOYMENT

Course Name	Type of employment	Average monthly salary (INR. Approx.)
Auto service technician	Small garage service shops	7800
Beauty therapist	Home based beauty parlor or opened a beauty parlor for themselves	6500
Electrical Works and Domestic Appliance Repair Services	Working as independent electrical technician and conduct door to door repair services when needed	8500
Stitching for leather goods & garments	Home based job	7000





Naya Savera

Testimonials



I am A. Velayutham from Nandambakkam. While I was pursuing my Diploma, I had to discontinue my studies due to some family problem. During that time I met the staff of LabourNet through a road show and they explained me about automobile course and its scope. This created a strong interest in my mind about pursuing a career in automobile. The session revived my interest in the automobile sector which had taken a back seat when I failed to secure a seat in engineering college because of lack of financial resources.

I have successfully completed the course and have been placed in ASCO Numatics (India) Pvt. Ltd. through the placement service. I am very happy that this job and course is helping me support my family. I am grateful to share my happiness with all the staff of LabourNet and L&T technology Services (LTTS) for giving me such an opportunity which helps me support my family.



A good career, a fortune to my life - My name is M. Suresh from Tambaram sanatorium. I only studied up to 8th standard as after that I was not able to continue my studies due to my family problems. My father was the sole breadwinner of our family who was working as a coolie supporting me and my two school going sisters. During this time, I met the LabourNet staff through the road show. They explained to me about the Automobile courses and it urged me to join the course. After completing the course, I have started my own two wheeler garage in my area itself and started earning nearly 800 to 1000 thousand rupees per day. This gives me a lot of motivation. I am really happy that I can support my father financially and I thank all staff of LabourNet and L&T Technology Service (LTTS) for giving me this bright opportunity.







I am Uma Mageshwari and I have studied up to 8th standard. I was unable to continue my studies due to my family's financial problem and started working at an export company at Sanatorium MEPS. At that time I met LabourNet staff through a road show and they explained to me about the different courses. I was interested to study the beautician course and joined the course at Tambaram center.

After successfully completing the course, I am now placed in Naturals Beauty Salon and am able to support my family with regular income. Also working at a reputed salon is helping me build my confidence. I am really happy to have studied this course and am grateful to the LabourNet team and L&T Technology Services (LTTS) for giving me this opportunity.



- Impact on 1000 families per year to earn their living
- Real income increase in candidates' family
- Independence & confidence inculcation among candidates
- Touch base the certified candidates for two years through network
- Diversity focused
- Goodwill and Brand visibility of LTTS





"LTTS' exclusive Skill Development program for differently abled"

INTRODUCTION

As per the Census 2011, over 5.4 million people have some kind of physical disability in India, followed by hearing impairment affecting 5.07 million and 5.03 million who have problems with their vision. About 2 million have speech disability, and 2 million are affected by mental retardation and other mental illnesses. The proportion of women suffering from seeing, hearing and multiple disabilities is higher than men.

People with disabilities are vulnerable to social devaluation and negative identities. Since social value is usually accorded to people who are perceived to be competent and skilled, we need to enhance their capabilities and skills to truly bring a change in their current status of vulnerability. Every little effort can make an enormous difference; hope can overcome cynicism and tenacity can prevail over material if citizens of a society can harness the most powerful energy in the world.

EXECUTIVE SUMMARY

Employment is often seen as an important step towards rehabilitation and empowerment of a differently abled person, because it provides a sense of belongingness, importance and independence. Being able to work and earn a sustainable amount of income is an effective way of evading social exclusion and poverty. However, differently abled people find it very difficult to be accepted as an active and functional member of the society. The chief obstacles in achieving employment are societal bias, individual circumstances (poverty, lack of skills), and physical limitations (bad health, lack of transport and accessibility). Hence, getting a well-paying, full-time job is a big struggle for them.

LTTS in consultation with ARCH designed an exclusive program which not only focused on technical skill set of the participants but also paid great attention in improving their confidence, motivation and communication skills. First batch of the program was launched on 30th July 2016 covering 30 participants followed by second batch with another 30 participants with different deformities from Vadodara district.

*Source: Arch Development Foundation

L&T Technology Services initiated "Naya Savera" in partnership with ARCH Social Consultants with an aim-

"To ensure equal human rights for the differently abled individuals in Vadodara by enhancing employability and providing them with opportunities to rise up with confidence and self-respect."



Program Process and Activities

• ARCH collaborated with organizations and NGOs working with differently abled to gather information about people living with orthopedic, locomotor and other different kinds of deformities. Organizations like Astitva foundation, Samvedana, Vocational Rehabilitation centre for women, Society for Physically Handicapped, Samaj Sureksha department, Vadodara were considered to find participants

• Post data collection, people were shortlisted based on their age, qualification, current employment status and one to one interviews were conducted with shortlisted candidates

• All the shortlisting and selection processes were conducted under the purview of the diversity framework

The selection process involved:

- Selection & Enrollment of the participants
- Launch of the program

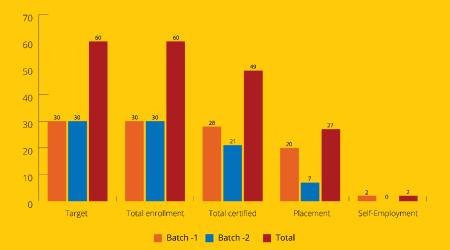
• Execution of training (Computer training, Soft Skill Development and counseling session)

- Individual participant's Portfolio development
- Mock Interviews
- Certificate felicitation
- Placement
- Program Evaluation

Following criteria was used to determine selection of the candidates during one to one interviews

- Candidate should be minimum 12th pass + diploma or graduate
- Should have partial hearing loss,

minor/moderate orthopedic or locomotor



Overall achievement of the project FY(16-17)

L&T Technology Services CSR Report 2017

deformity

- Should have basic knowledge of computers
- Should be able to follow basic instructions in English

• Should possess basic interest and zeal for their own development

• Should be free from other work obligation to opt new opportunities

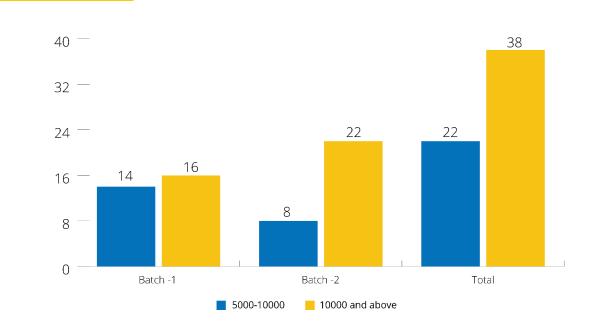
At Naya Savera, we believe in measuring what matters and the extent of the impact of intervention undertaken by LTTS and ARCH jointly.

Therefore, a 360-degree evaluation was carried out of the program by capturing views of all the key stakeholders.

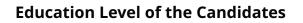
Profile of the participants

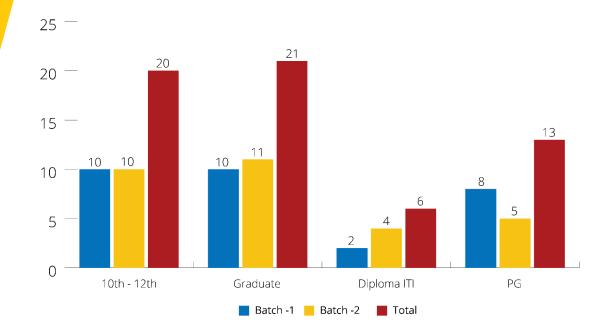
Data in this section represents the profile of 49 participants who have completed the course successfully. There were 11 participants who dropped out from the course due to various reasons viz. timings, got placement, distance and so on.



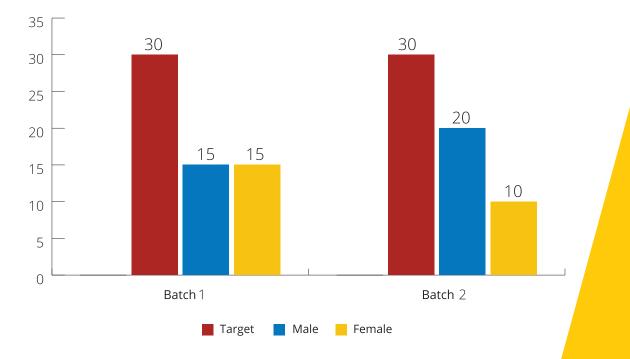


Family Monthly Income of the Candidates









Gender Wise Details of the Candidates

Naya Savera– A unique initiative, bringing a fresh beginning in the lives of 60 differently abled participants was launched on 30th July 2016 at Tops Technology Centre, Vadodara, Gujarat by Divya Bhatt.

TRAINING DETAILS

Focus of the program was "development of skills, knowledge, and a positive attitude in participants".

These three elements put together formed the key to success in finding a desired and fulfilling job for the participants.

Topics covered during the training included -

- Computer Training
- Soft Skill Session
- Counseling Sessions
- Spoken English Classes
- Interview Etiquettes
- Expectation of Corporate
- Government jobs and schemes for PWD
- Resume Building
- Team Building
- Creative thinking & Problem solving
- Sexual Harassment at workplace
- Self-Efficacy
- Measuring Outcome Naya Savera



Job Placement of Participants

The 30 who continued with their studies procured a success ratio of 70%. Their job profile varies from administration to finance and production department. 16 participants from the first batch are placed in different companies, 3 are self-employed and 2 participants opted for higher education.

Success of any training program is measured based on the job placements participants secure after the training is over and Naya Savera helped 70% of the participants in securing a stable job.

The Challenges

- Biggest challenges faced during the job placement was perception of employers towards differently abled where they perceived that a differently abled person cannot perform the way a normal person can do
- To overcome the fear of participants of facing the interview
- Courage to face one or more rejections especially after experiencing a very welcoming and accepting atmosphere during the training
- Some participants were also afraid of losing their new found confidence



Job Placement

Companies like Transpek not only showed their high willingness to include participants of Naya Savera in their team but also took responsibility to guide and train them by appointing one mentor with each and every candidate recruited by them.

Today 20 participants from Naya Savera training have a respectful job with good salary in various companies.

Departments where the participants of Naya Savera were recruited, are front desk, administration, shop floor, accounts and project management.





VOLUNTEERING PROGRAM

Employee volunteering was one of the major components of the program wherein skill based volunteering was designed and executed throughout the program.

In the beginning of the program, a soft skill training module was designed in consultation with CSR team of LTTS. These sessions were conducted for two hours on Saturdays. It was a very well planned and managed initiative that not only provided a platform to our participants to learn from them but also offered an opportunity to volunteers to effectively serve program needs which in turn motivated and sensitized them towards the need of special people.

Sessions on developing the following skills were organized by volunteers:

- Inter-personal skills
- Motivation and confidence
- How to make effective CV and interview skills
- Business communication and basic etiquettes
- Fundamental rules for grooming
- Expectation of corporates from employees
- Self confidence
- · Building right attitude towards work and life at large
- Effective communication at workplace

Volunteers from L&T Technology Services contributed more than 100 hours of service by conducting various sessions on soft skill development for the participants of Naya Savera







"I am feeling highly motivated after the session. A very nice experience indeed. I learned more today than what I taught through my session."

Mr. Gaurav Pandey LTTS Volunteer

> "A very enthusiastic group. They all have an eagerness to learn which has motivated me to teach them. They not only wish to learn but are also eager to share their thoughts and facts about themselves. A great job and training program."

Ms. Anjana Nair LTTS Volunteer

Session on basic etiquette was very necessary and well received by the participants. To my surprise participants also contributed their experience. I am sure they will be benefited from this session.

Mr. Atul Khanke LTTS Volunteer



CANDIDATE TESTIMONIALS



Amisha Patel a 25 year old woman who has hearing and speech impairments is currently working at Transpek Company as a receipt entice accountant and has also been a trainee at Naya Savera. Her mother retells her daughter's journey of being a special child to now, being a confident woman.

Amisha has pursued MBA in Finance through distance learning. Her family had no financial barriers but unfortunately, Amisha's impairment is incurable. There was not much her parents could do. Due to her being differently-abled, the parents were skeptical about letting her work after college.

Before Naya Savera training, they were doubtful about Amisha's potential, but after the training at Naya Savera her mother says she has noticeably seen a change in her daughter. She adds and smiles

about her daughter being more positive, strong and open to people than before and she's grateful to Naya Savera for making them believe in the change and they're proud parents to see their daughter standing on her own feet.

Amisha thanks Arch Social consultant and L&T Technology Services (LTTS) for giving her the opportunity to grow in career.



Pintu Sodha Parmar, 28 with 50% locomotor deformity lives with his wife and parents. He works in a project department for a Transpack company. He has a diploma in civil draftsman from I.T.I and aspires to become a businessman someday. His father has been a constant source of support albeit he wants to be independent and earn his own living.

Being differently-abled, society perceived him as somebody dependent; it was disheartening for him when he was rejected by many recruiters. Rejections made him lose heart and he gave up on trying to prove himself as efficient as a normal person. After being a trainee at Naya Savera, he recalls his experience as life changing training where he learnt about the misconceptions of success. He feels this training has not only provided him theoretical knowledge but

also he can notice the shift in his personality and confidence. He is more self-assured, optimistic and efficient. The company where he worked in AutoCAD before, now he works in project department. He is really happy with the kind of personal attention and guidance the individuals receive from the trainers of Naya Savera.

Pintu thanks Arch Social consultant and L&T Technology Services (LTTS) for giving him the opportunity to build a bright future



INTRODUCTION OF EDUCATION PROJECT: MINI SCIENCE LAB

Quality and access to education is one of the major concerns in government aided schools as there are a number of challenges like lack of proper infrastructure, teaching learning material, lack of exposure in the schools etc.

The scenario is challenging in Government aided schools when it comes to science education, and the most basic problem that has persisted and resisted solution since Independence is our inability to provide schools with basic infrastructure facilities, labs and equipment to be used while teaching science.

The science lab not only helps students to develop literacy skills but also stimulate curiosity, provide practical opportunities to explore a concept in an easy way and develop appropriate understanding of the concepts. This is sadly absent today in our schools especially in rural and municipal schools. Mini science lab is conceptualized with an aim to inculcate basic concepts of science, engineering, mathematics at school level, thereby encouraging inclination of students / learners towards science and technology. Models designed by STEM Learning, a non profit organization based out of Mumbai help students in identifying and experiencing the actual products which they learn from text books, making it more practical.

STEM believes that school education can't only be in audio or visual format as it is important for children to practically feel the products and experience it. With the same vision, STEM already owns 100+ products for better learning and believes in adding more for improved learning of students specially who are from less privileged section of the society.

With the same goal, L&T Technology Services collaborated with STEM Learning, Arch Social Consultants and Aarambh to install Mini science lab in schools of Mumbai and Vadodara with the following goals:

• Improving access to quality education & learning, esp. for students from Government aided schools

• Enhance capacity and skills of teachers to teach science and mathematics in a more effective and interesting way by using various models developed by STEM Learning.



Naya Savera



PROJECT LOCATIONS



aaracobh

Aarambh



PROJECT OBJECTIVE

• Improve access to quality education & learning, especially for students from under privileged sections of the society

• Enhance the capacity and skills of teachers to teach science and mathematics more effectively and interestingly

• Provide students and teachers a platform to exhibit and execute learning through customized modules

• Create partnership and collaboration with various stakeholders for the sustainability of the project

SCOPE

Enhance the capacity and skills of teachers to teach science and mathematics in a more effective and interesting way by using various models developed by STEM Learning. Improving access to quality education & learning, especially for students from Government aided schools.

MISSION STATEMENT

Ignite Scientific interest in children so they -

Question intelligently; Learn through discovery; Connect scientific knowledge to their world and consider a career in science.

VISION

To be recognized globally for bringing innovative learning products in School Education and contributing to the society by uplifting the less privileged students.

SITUATION ANALYSIS

Mini science lab is a very powerful and innovative instrument to revolutionize science education and make education increasingly accessible. It is a catalytic channel that is fun, engaging and interactive, aimed to raise awareness among children and teachers from the less privileged section with a focus on science. Mini science lab has a range of 60 table top working models with back-drops and manuals in local language providing hands-on experience for learning Science and Mathematics for Class 5 through 10. The models are approved by MSERT and NSERT for their alignment with the curriculum.

- SWOT analysis
- Problem Analysis
- Stakeholder analysis





Naya Savera

NEED ANALYSIS

Science is knowledge about the material, natural world. It is knowledge produced from systematic observation, measurement, experimentation, exploration, and speculation and theorization about natural objects, their properties and their interactions. But unfortunately Science education in India is faced by various practical challenges today.

Whether the topic of forces in Physics or the solubility of substances in water from Chemistry, or germination in Biology, the science curriculum directs attention to the material world, to things and processes in it, about which it would like children to learn—to notice, name and think about things based on concepts and theories that characterize these disciplinary approaches.

However, this material world is conspicuously absent in the Indian science classroom and the school. The science classes are no different from history or geography or language. They are also taught by teachers from textbooks. This not only limits the learning of students about science but also lessen the interest of children in science subjects.

The science lab helps students to develop literacy skills. Science activities done in the lab stimulate curiosity, provide practical opportunities to explore a concept in easy ways, develop appropriate science understanding of the concepts which is sadly absent today in our schools especially in rural and municipal schools.

PROGRAM PROCESS AND ACTIVITIES

SELECTION OF SCHOOL

- Schools up to 10th or 12th Standard were selected to ensure the benefit of the program reaches maximum number of students
- Should be Government aided school and not private
- Willingness to provide space to install Mini science lab with required electrification as some of the models are electrically operated
- Readiness to take ownership of the project in terms of maintaining the center and ensuring proper usage of the models
- Schools should not have any such facility in place to avoid duplication of the activity



RAPID ASSESSMENT

• After the schools were finalized, rapid assessment was carried out to assess the current knowledge of students about science

- Challenges faced by teachers and students in teaching and learning science and mathematics
- Current teaching methodology in school for teaching science and mathematics
- For rapid assessment, 8 science teachers, 8 principals and 152 students from 7th to 10th standard were covered through random sampling
- Structured Questionnaires were used to interview teachers and principals
- Information from students was gathered through structured questionnaires and FGD Performa

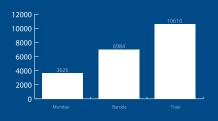
INSTALLATION OF MINI SCIENCE LAB

PROGRAM LAUNCHING

TEACHERS TRAINING

Teachers' workshop is a good platform to bring teachers from all the schools together who have been teaching science and mathematics. Teachers were also given the responsibility to manage and maintain the Mini Science lab. It gives an opportunity to all the teachers to discuss and address some academic issues/ challenges / problems/ doubts etc. that they face in their day-to-day teaching methodology.

In connection with the same one day workshop was organized at project level bringing all the teachers together under one roof with the following aim.



Milestone- Science Lab Kit

₽//

L&T Technology Services CSR Report 2017



8/2

EDUCATION PROJECT: MINI SCIENCE LAB

OBJECTIVE OF THE TRAINING

- Building rapport with the teachers who will be an integral part of Mini science lab project.
- To equip the teachers with practical knowledge of using different models installed under Mini science lab project

• Providing a platform for teachers to discuss and address challenges faced by them for teaching Science and Maths.

INAUGURATION OF MINI SCIENCE LAB















FORMATION OF STUDENT COUNCIL

In all the schools, a students' council was formed with the help of teachers, supervisors and school principals with the purpose of sharing ideas, interests and concerns related to Science education. The students' council will also be responsible to take care of Mini Science lab in the school as well as help with coordination during activities like events and programs organized by ARCH and STEM Learning special science projects and maintaining Mini Science lab in the school.

SCIENCE FAIR

IMPACT ASSESSMENT

TRAINERS INVOLVED

NETWORKING AND COLLABORATION

OUTCOME

• Improved interest of students for learning science and mathematics by creating a child friendly ecosystem

- Enhanced learning and skills of teachers on teaching science and mathematics
- Improved regularity in conducting the science and maths classes through better engagement of teachers in teaching
- Improved performance of students in examinations
- Increased number of students (especially girl children) pursuing science and mathematics after completing secondary education



MILESTONES COVERED TILL Q4

• 10610 students trained on basic concepts of science, and mathematics in municipal and Government aided schools

• 80 teachers from Government Schools trained to teach science and mathematics

S.No	School	School Location	
01	Gyan Vikas Hindi Vidyalay, Digha	Navi Mumbai	230
02	Samata Hindi Vidyalay, Turbhe	Navi Mumbai	307
03	Ekta Vidyalay, Rabale	Navi Mumbai	112
04	04 Prerna Hindi Vidyalay, Ghansoli Navi Mumbai		214
05	Rajarshri Chh Shahu Maharaj School, Rabale	Navi Mumbai	1863
06	NMMC School (31,32,114)Rabale and Kopar Khairne	Navi Mumbai	900
07	M.E.S High School	Baroda	1675
08	Sardar Vallabh Vidhyalaya	Baroda	2348
09	Mook Dhwani (Deaf & Mute School)	Baroda	235
10	Lal Bahadur Shashtri	Baroda	2428
11	Navyug Vidhyalaya	Baroda	298
	Total Students covered		10610



QUANTITATIVE

Targeted outreach of the program in terms of Schools, students and teachers:

- 80% teachers attend minimum two teacher's training program
- 75% of targeted students have access to Mini science lab
- 75% schools use Mini science lab minimum once in a week
- 50% of students and teachers will attend and participate in special events
- Contribution from community/school in terms of time, labor, space and other infrastructure facilities
- Contribution through Employee Volunteering Programs

QUALITATIVE

- Improved infrastructure in the school
- Enhanced learning and skills of teachers on teaching science and mathematics
- Enhanced learning of students on science and mathematics
- Increased number of students (specially girl children) pursuing science and mathematics
- Improved performance in examinations

CHALLENGES

- Permission to install Mini Science lab in Government Schools
- Support from School authority
- Students participation
- Maintenance of Mini Science lab



INTRODUCTION

*Approximately 285 million people worldwide live with visual impairment. Of these, 39 million people are blind (defined as best corrected vision of less than 3/60 in the better eye), and low vision in approximately 117 million people is due to uncorrected refractive errors. 80% of global blindness is also avoidable.

One in every three treatable blind people in the world is an Indian. The number of blind people in India is currently over 18 million and this estimate is 50% more than the figure of 12 million from a decade ago. It amounts to approximately one-fourth of all the blind people worldwide making the Indian blind population account for 20% of blindness.* Cataract is still the major cause of avoidable blindness in India. Taking the existing prevalence rate into account, it may be difficult to achieve total elimination of blindness in India by 2020. The high magnitude of avoidable blindness in India is concentrated in the rural areas mainly due to the lack of trained ophthalmologists being present in villages, under-utilization of public health services for the eye due to lack of awareness, lack of capital (from both government and public sector) for introducing facilities in the rural areas that can provide primary and secondary care for the eye, and lack of adequately trained manpower. These problems can be solved with mobile, comprehensive and sustainable eye care system provided it is easily accessible by the rural people in villages. In addition, the outreach camps must ensure quality, especially in terms of screening visionthreatening diseases, referral services, and affordable & rapid rehabilitation.

*Source: Medical Research Foundation

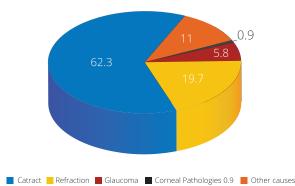
NEED FOR THE PROJECT

Even with a great amount of focus on the identification and treatment of cataract in India, Cataract continues to remain the major cause of Preventable Blindness in the country. 70% of the population of our country lives in rural areas. *70% of the Ophthalmologists practice in urban cities and towns. Many of the people living in rural areas are daily wage earners and for them the travel to the city will involve

- Expenses for the travel and stay in the city for themselves and an attendant
- Loss of wages for the number of days that they are in the city
- Loss of wages for the attendant*

*Source: Medical Research Foundation

CAUSES OF BLINDNESS IN INDIA



44



GOAL

"To provide total eye-care solutions of highest standards to all sections of the community"

Project Proposal:

To perform cost-free cataract surgeries in rural villages using **Mobile Eye Surgical Unit (MESU).**

OBJECTIVE OF THE PROJECT

• Serve comprehensive ophthalmic care to the rural population in remote geographic location who have no access to urban centers

• To identify the causes of blindness in rural population and prevent it by providing timely diagnosis of eye diseases

COLLABORATION

This project, therefore, is designed to provide Quality, World-class eye care to the rural population, at their doorsteps, totally free of cost to them. This project is the "FIRST OF ITS KIND IN INDIA" and the only project that has been approved by the Government of India, Ministry of Health and Family Welfare to carry out Cataract surgeries at the door-step of the rural indigent. This unit, jointly developed by Indian Institute of Technology (IIT), Madras and Sankara Nethralaya is the pioneer at delivering eye care in the villages.

PROJECT COMMITMENT

• The path-breaking project of Sankara Nethralaya, aims at tackling the major cause of preventable blindness namely Cataract by taking quality eye care to the door-steps of Rural India.

• Project consists of 3 vans –1 van (sterile) consisting of the Operation Theatre and 1 van (unsterile) consisting of a changing room, toilets etc. The 3rd van is for transporting people and material.

- Educating people about various eye diseases and measures to prevent the same is also a very important part of the program.
- To reach out to the community who have no access to eye care, let alone quality eye care.

Joining hands through Corporate Social Responsibility Project for a Mutually Beneficial Relationship: The Mission of Sankara Nethralaya is to "Provide Total Eye-care solutions of highest standards to all sections of community".

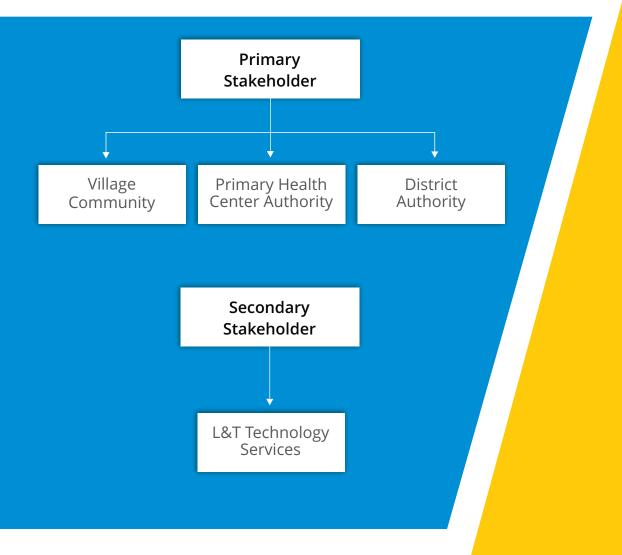




METHODOLOGY

Sankara Nethralaya (SN) approached L&T Technology Services, Chennai with a request to extend funding support under their CSR program to conduct this MESU camp. LTTS, under the leadership of Mr. Manivannan, gracefully agreed to support 5 MESU camps during FY 2016-17. After signing the MOU, SN started the camps.

STAKEHOLDERS OF THE PROJECT





PROCESS FOLLOWED TO CONDUCT THE PROGRAM

(<u>m</u>)

After assessing the suitability of the camp location, the statutory approval from the District Collector will be obtained by Sankara Nethralaya. The display banners and leaflets about the camp will be printed by Sankara Nethralaya will ensure that the camp details reach the targeted beneficiaries. Any support from the sponsor in spreading the message about the camp activity will be an added advantage. The display banner & leaflet will contain the name of L&T Technology Services & Sankara Nethralya along with the camp details.

A team consisting of Ophthalmologist, Optometrist, Nurses, Operation theater assistant, Drivers and Maintenance technician will travel to the campsite.

After a complete eye examination, the patients identified with cataract and found fit for surgery will undergo Cataract surgery at the camp site itself. The patient after 2 hours observation can go back to their homes and report the next morning for post-operative check up.

Those who are found unfit to be operated at the camp site will be referred to our community hospital at Greams road, Chennai for further treatment under free category. An ambulance - 108 van will be stationed at the camp site during the surgery to meet out any emergency.

PROCESS AT THE CAMP SITE

Patient Registration:

With support from the camp sponsors, local volunteers (mostly students from schools and colleges) the patient's details like name, age and address is recorded in the Electronic Medical Records. Camp patients are then given identity cards. The second level of detailed eye examination includes noting the patient details in the Electronic Medical Records with the help of Laptops at the camp site.

Vision Check:

Patients who are registered undergo a screening by the Sankara Nethralaya Social Worker. Vision charts such as the Snellen and E type charts are used for screening.

Refraction:

It refers to examining the eye in order to determine whether a spectacle is necessary or not. A Refractionist from Sankara Nethralaya carries out the process.

Slit Lamp Examination:

A slit lamp examination is also carried out on patients at the camp.

Intra Ocular Pressure:

Patients above the age of 40 have their Intra Ocular Pressure tested. Those who are prescribed glasses are sent to the Optical Services.

Counseling:

The eligibility criteria for free surgery is explained to the patients who are also counseled at the campsite. The referral card is given to the patient to attend the OPD in Jaslok community ophthalmology center.





ACTIVITIES CARRIED OUT AT MESU CAMP



Arrival of Sankara Nethralaya team at the camp site from Chennai. Making arrangements for OT wash and OPD settings



OPD starts with complete eye screening and it identifies the patients who need cataract surgery, after ascertaining the fitness, patients will be asked to come for surgery



OPD continues as above. Simultaneously cataract surgeries also start from Day-5



OPD and surgery - Removal of the patch and post-operative check up with eye care counseling



OPD and surgery - For the previous day surgery patient's patch will be removed and post-operative check up with eye care counseling will be done. Patients of day 5 and 6 will do a second post-operative checkup

Patients of day 7, have a second post-operative checkup. All the patients will be given eye care counseling after which the team leaves for Chennai from the camp site

After one week, Sankara Nethralaya team visits the campsite and does postoperative checkup for the surgery patients of day 8 and 9 with eye care counseling

After one month Sankara Nethralaya team visits the camp site and checks all the surgery patients to identify their requirements of power glasses

25 days after identifying the power glasses requirement, Sankara Nethralaya team visits camp site and delivers the power glasses to patients. With this, the camp activities will be completed



ACHIEVEMENTS IN 2016-17

S.No	Date	Location(Address)	Distance from Chennai (one way kms)	Total Patients Screened	Total patients Operated and provided free glass
01	Nov 25-Dec 4, 2016	Naidupet, Nellore Dt., A.P.	110	743	107
02	Jan 1-11,2017	Thirukoilur Villupuram Dt., T.N.	180	1185	109
03	Jan 27 - Feb 5, 2017	Jamunamarathur(Jawadhu hills), Tiruvannamalai Dt., T.N.	220	486	100
04	Mar 18 -27, 2017	Muthialpettai, Kanchipuram Dt., T.N.	80	786	142
		TOTAL		3200	458

TESTIMONIALS

740	J
	1
P	22
Pa	ALSO A



Location - Muthialpettai Name of the patient - Kanniammal Gender - female | Age - 70 Background - BPL/ST SC/OBC - BPL Source of earning, Annual Income and family background - son works as daily wage labor Patient's health related information - poor vision due to cataract Came to know about the Sankara Nethralaya, MESU camp from notice and banner displayed at Muthialpettai Regained normal vision after undergoing Cataract surgery at MESU camp Kanniammal thanks Sankara Nethralaya for all the support and L&T Technology services for supporting the MESU camp







Location - Naidupet Name of the patient - Suseelamma Gender - female | Age - 82 Background - BPL/ST SC/OBC - BPL Source of earning, Annual Income and family **background** - son works as daily wage labor. Patient's health related information - Low vision due to cataract Came to know about the Sankara Nethralaya, MESU camp from notice and banner. Regained normal vision after undergoing Cataract surgery at MESU camp Suseelamma thanks Sankara Nethralaya for all the support and L&T Technology services for supporting the MESU camp



Location - Thirukoilur Name of the patient- Sengamalam Gender - female | Age - 80 Background - BPL/ST SC/OBC: - BPL Source of earning, Annual Income and family **background** - son works as daily wage labor Patient's health related information - low vision due to cataract

Came to know about the Sankara Nethralaya, MESU camp - from notice and banner displayed in Thirukoilur How did she benefit from the camp? - regained normal vision.

Sengamalam wants to donate a little amount of money she saved for her Tirupati pilgrimage trip and thanks Sankara Nethralaya for all the support and L&T Technology services for supporting the **MESU** camp.



(200)



Location - Jamaunamarathur, Jawadhu hills. Name of the patient - Amanullah Gender - male | Age - 70 Background - BPL/ST SC/OBC - BPL Source of earning, annual income and family background - son works as daily wage labor Patient's health related information - poor vision due to cataract Came to know about the Sankara Nethralaya, MESU camp from notice and banner displayed at Jawadhu Hills

Regained normal vision after undergoing Cataract surgery at MESU Camp.

Amanullah is very grateful to the doctors as he was unable to go to any hospital for treatment due to financial problems and thanks Sankara Nethralaya for all the support and L&T Technology services for supporting the MESU camp





INTRODUCTION

2010–2020 has been declared the 'Decade of Innovation' to stimulate innovations and produce solutions for societal needs such as healthcare, energy, infrastructure, water and transportation. Harnessing Innovation and Technology driven solutions to address the social needs of the community.

LTTS has collaborated with Indian Institute of Technology (IIT), Madras to execute CSR project related to innovation and technology. A fund research project which will support the community needs and specially abled people.

INTRODUCTION TO CREATE

The Centre for Rehabilitation Engineering and Assistive Technology (CREATE) is a multidisciplinary translational research and educational initiative of IIT Madras. It was conceived as we began interacting with NGOs and inclusive schools. There is a social need for the indigenous development of low cost technologies that serve to address the needs of people with different abilities.

The Research center aims to -

- Develop assistive devices for low resource settings
- Act as a resource centre for students/staff who need assistance
- Coordinate courses related to assistive technologies
- Teach courses on Assistive Technologies for B.Tech students
- Teach courses on Sensory, Motor and Language Disorders



CSR Force for a Cause

INNOVATION AND TECHNOLOGY: TECH UDAAN

LOCATION



PROJECT OBJECTIVE

Create solutions using mechanical and embedded systems for individuals who are differently abled.

BENEFICIARIES OF THE PROJECT

Individuals who are differently abled, Schools, NGOs, rehabilitation workers and doctors who are engaged with academia and industry related to differently abled people.

PROGRAM PARTNER

Indian Institute of Technology, Madras

DURATION OF PROJECT

Five years

L&T Technology Services CSR Report 2017



🙀 INNOVATION AND TECHNOLOGY: TECH UDAAN

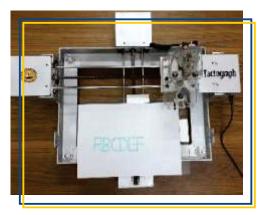
SOLUTIONS



iGest: iGest is a wearable device that identifies the natural movement of an individual and associates it with a predetermined sentence of their choice enabling communication. The device captures the user's movement using a combination of sensors and sends this information to a mobile phone.

KAVI PTS: KAVI is a picture-to-speech Android application for people with cerebral palsy or autism spectrum disorders in early levels of literacy. This is customizable and allows the user to change the pictures and the audio files. KAVI supports multiple languages, currently comprising English, Tamil, Kannada, Hindi, Malayalam, Vietnamese and Bahasa. It is available for users online and can be downloaded from Google Play Store





Tactograph: Tactograph is a motorized x-y stage that traces a predefined picture using an adhesive fluid, creating a tactile image on a normal A4 sized paper. It also has the ability to reproduce the tactile image as an outline on printed books, by using software based image processing to correct for any translation and rotational changes while placing the book.

ADITI: ADITI is a non-contact switch for a person with motor disability, helping them "click" on a computer screen. ADITI can accommodate a range of movement abilities and can be set to work at a distance of 4 cm for small movements such as a finger stretch or 9 cm to accommodate large movements such as a head thrust or lifted arm.





INNOVATION AND TECHNOLOGY: TECH UDAAN

SOLUTIONS

<u>Vsim:</u> VSim (Visual Simulator) is an application designed for Android phones and tablets. It aims to educate the patients and their relatives to see the effects of the visual impairment due to various eye diseases using the camera in the phone or tablet. <u>vPlay:</u> vPlay is a wireless dual-touchpad system that can be used independently or jointly for computer games that encourage control and response. With two large active surfaces, it is easily adopted by children with motor disability. vPlay can also be configured to be used as an input device to any software that accepts inputs from a switch.

MILESTONE COVERED IN 2016-17

Milestone Plan	Actual Status	Outcome (Deliverables)/ Impact		
iGest v4	5 units of iGest were produced for internal (alpha) testing	Gesture data collection on BLE has been tested. The hardware works with a game PyCube, that demonstrates control of yaw, pitch and roll		
KAVI-PTS	KAVI-PTS v3.0 is developed with the picture library consisting of around 300 images. Software testing is on process.	The application has been released for alpha testing. Beta release is scheduled for April 2017.		
Tactograph	One unit of Tactograph was delivered to SPASTN in Jan'17. Manufacturing of next batch is ongoing.	4 units are to be delivered by May'17		
VSim	The app for vision simulator is developed for the Cataract.	The field test is to be carried out by April – May'17.		
vPlay	2 units are manufactured.	Internal testing is ongoing. There appear to be some problems with the RFduino being used, and we are considering switching to the Intel Curio		
		Haben Girma https://habengirma.com/ Lecture on Access in Education on 28th Nov		
Event	Workshop and outreach activities	The products were demonstrated at National Institute of Empowering Persons with Multiple Disabilities (NIEPMD), sharing knowledge about assistive devices.		
		A similar presentation was made at DARE, Munnar		



INNOVATION AND TECHNOLOGY: TECH UDAAN

OUTCOME

- The data is now directly collected by the system for classification / clustering
- An additional feature has been implemented in KAVI-PTS_3.0 that enables the user to give permission to access the storage from the Android OS 6
- Tactograph: MOSFET was replaced by an Opto Coupler which solved the compatibility issues
- Tactograph: The rigid coupler is replaced by a flexible coupler that solved the inertial issues

CHALLENGES OF THE PROJECT

• Collecting data from iGest and storing it to a tablet and then converting it to the excel format in the system for the purpose of classification / clustering

- The OS version compatibility in KAVI-PTS
- Tactograph: Relay ON & OFF problem emerged leading to the issues of compatibility
- Tactograph: Stepper motor starting inertial problem

"A drop of water is worth more than a sack of gold to a thirsty man."

INTRODUCTION

While 67% of Earth's surface is covered by water, only less than 2.7% of global water is freshwater. Most of the freshwater (2.05%) is locked in ice caps and glaciers. Only less than 0.7% is available for human use.*

The entire world, in general and in particular, faces a major crisis of water in recent times. This crisis threatens the basic right to drinking water of our citizens; it also puts the livelihood of millions at risk.

India is in a high risk condition. The government of India has taken several steps to address water related problems. But the size of intervention has to be increased by joining hands like private public partnership, corporate social responsibility and by the support of nongovernment organization initiatives.

Since Indian economy is agrarian in nature, supporting nearly 65% of its population, the agriculture sector supplies raw materials to various industries like sugar, textiles, edible oils etc. employing majority of Indian workforce. Scarcity of water will lead to serious socioeconomic implications in the country.

Up to 75 to 80% of India's water is used for irrigation. The two main sources of irrigation are canals and groundwater.

*Source: National Agro Foundation

57

NEED FOR WATERSHED DEVELOPMENT PROJECT

As 75% of water is being consumed for irrigation, water scarcity would impact the livelihood of majority of small and marginal farm households.* This also leads to competition for water between drinking and irrigation. Continuous drawing of water for irrigation over time without proper replenishment leads to scarcity of water for drinking. Of late, the agriculture productivity is on the declining trend as more area has become unfit for cultivation. One of the main reasons is the loss of natural resources like soil, water and associated problem of declining soil fertility.

To prevent the loss of soil and water and to conserve and sustain the natural resources, watershed development project is being taken up. The basic essence of this project is not only the conservation of natural resources but also the accrued benefits derived out of ground water increase, cropping intensity and improvement in farm productivity. This will not be effective unless the farmers are enriched with technological innovations to improve the use efficiency of conserved resources.

*Source: National Agro Foundation





WHY WATERSHED DEVELOPMENT PROJECT (WDP)

Watershed Management has been the foremost approach for conservation and management of water in India since time immemorial. However, with the advent of tapping the groundwater, watershed management was not given adequate attention in the recent past and the impact of negligence in this regard has already been realized. Focus on watershed management assumes significance under the current context. Watershed Development Projects (WDPs) aim to balance the conservation, regeneration and use by humans of land and water resources within a watershed. Common benefits from successful watershed development projects include improvement in ground water leading to sustaining agricultural yields and increased access to drinking water. The overall attributes of the watershed development approach, by and large, are three fold, viz. promoting economic development of the rural area, employment generation, and restoring ecological balance.

Watershed development refers to the conservation, regeneration and the judicious use of all the resources – natural (like land, water plants, animals) and human – within the watershed area. Watershed Management tries to bring about the best possible balance in the environment between natural resources on the one side and man and animals on the other.

ABOUT THE PARTICIPATORY WATERSHED MANAGEMENT PROJECTS UNDER CSR

The problem of depletion of ground water as well as potential threat to water security could be addressed only through a comprehensive approach with participation from multiple stakeholders including the Corporate Sector Agencies. L&T Technology Services has taken up the mission of holistic development of villages with water management as its central theme under the Corporate Social Responsibilities (CSR) initiatives. In this connection, it is partnering with National Agro Foundation, a Public Charitable Trust with proven track record on water management through watershed and natural resource management. Based on the suggestions from L&T Technology Services, short listing of potential locations for undertaking watershed projects was carried out in Pune District.

The choice of the watershed is based on the Interest evinced by L&T Technology Services where it can undertake CSR projects as per the new CSR guidelines under the Companies Act 2013.





CRITERIA FOR SELECTION OF WATERSHED

The potential watershed locations in Pune district were identified using remote sensing maps and available geo physical data. As many watershed locations were identified for ground study in order to shortlist final location by M/s L&T Technology Services. The preliminary study was conducted for Identifying Kolwadi watershed based on the following criteria -

• No overlapping of watershed interventions by any other agency including Government

• The potential to undertake watershed project with community participation

• Potentiality to carry out various interventions holistically

• Priority to rural or semi urban areas where there is no rapid urbanization

• Location where agriculture and allied sector activities are predominant

• Kolvadi village was identified as a suitable location for watershed project after a field reconnaissance visit was made to all the shortlisted locations to understand the nature of terrain, slope and other parameters required for watershed project.

• The identified location is about 50-60 km from Pune

• The slope of the location is 15%

• The chances of perceived benefits are high

• No other agency has covered this location in the recent past and no plan from the Government in near future

PROJECT LOCATION

Kolwadi, Katavadi, Mangdari and Nigde villages in Pune district



PROGRAM IMPLEMENTING PARTNER

Kolwadi, Katavadi, Mangdari and Nigde villages in Pune district

PROJECT DURATION

Three years

OBJECTIVE & SCOPE

- To conserve land and water resources through various watershed activities by 2019
- To create village level institution like Mahila Pani Samiti (MPS), Village Watershed committee (VWC)
- To increase the source of income and Improve the quality of life through land and water





PROPOSAL

Soil and water conservation measures – (construction of loose boulder structures, gabion structures and check dams) Green Cover (tree planting with timber trees, fruit trees, soil binders and pasture development) Training and Demonstration- (higher crop productivity such as micro irrigation, lean farming, and soil health management).

BENEFIT & IMPACT BY THE YEAR 2019

- 2000+ people from watershed villages will have access to water by 2019
- More than 2000 hectares will be treated under the project
- Increase in ground water table to the tune of 25 feet by 2019
- Increase in area under cultivation by 20-25% and agriculture crop yield by 25 30% by 2019

MILESTONE COVERED TILL DATE

- Bhumi Pooja and inauguration of the project
- Meeting and Interaction of Anna Hazare with Kolwadi famers at Ralegan Siddhi
- Entry point activities (EPA) at Government schools
- Formation of Watershed committee and Mahila PANI Samittee
- Watershed training was steered for the beneficiaries of Mangdari village

OUTCOME OF THE INTERVENTION IN 2016-17

The words of Mr. Anna Hazare influenced the participants in an effective way to achieve the target towards development of their villages. The participants were very thankful to L&T Technology Services for providing such an informative platform to learn. The farmers gained a lot of information and awareness with regards to the watershed development work and the active involvement of the villagers also gave an eye opening experience to the participants.

The program motivated the farmers assuring their cooperation during implementation of the project and also took the ownership of maintaining the structures to be established during the project period. With the creation of VWC and Mahila Pani Samithi, all the watershed activities are to be carried out with the resolution passed by these committees in future.





CANDIDATE TESTIMONIALS



Name: ANANTA CHORAGHE Village: KOLAWADI

During the exposure visit to Tamil Nadu I have seen the benefits of watershed program with my own eyes, such a tremendous improvement in ground water.

Through exposure visit I came to know the importance of soil testing and use of organic fertilizer, organic pesticides, soil testing, benefits of farm pond, Water Absorption Tank and Check dams. All our fields

in Kolwadi are mainly dependent only on rain fall so soil testing as well as usage of organic fertilizer and pesticides is very important for our field. I am also going to practice these techniques in the coming years in my field and I am thankful to L&T Technology Services and National Agro Foundation (NAF) for giving me the opportunity to participate in the exposure.

This has been really beneficial and I will surely communicate my learnings to my friends and relatives in Kolwadi and will surely participate and support in all the watershed activities of L&T Technology services.



Name: RAMCHANDRA PATHARE Village: MANGDARI

I am thankful to L&T Technology Services and National Agro Foundation(NAF) for giving me the opportunity to participate in the exposure visit to Tamil Nadu watershed project. I visited solar pump set, inland fish culture, organic rice field, teak plants and water harvesting structures such as check dams, farm pond, Percolation Tank, WAT and LBS.

I have been practicing traditional agriculture for years at Mangdari. But during the exposure visit to Tamil Nadu, I saw the benefits of watershed programme and the tremendous improvements in ground water through farm pond, Water Absorption Tank and Check dam. Participation of farmers and women groups in watershed project and maintenance of watershed structure was beyond my imagination.

Through exposure visit, I also came to know the importance of soil testing and use of organic fertilizer, organic pesticides and timely testing of soil. Exposure trip to watershed project really benefited me. I will surely communicate my learnings to my friends and relatives in Mangdari.





Name: UTTAM SHINDE Village: NIGADE

This exposure visit was very important to me and all farmer friends. From the exposure visit we received useful information related to agriculture, as well as culture and food habits of Tamil Nadu. The demonstration of soil testing was very good and it is very important for agricultural benefits. In the field visit we saw water harvesting structures such as check dams, farm pond, percolation tank, Water Absorption tank (WAT) and Loose Boulder Structure (LBS). All this

information is very useful to me and I am very thankful to L&T Technology Services & National Agro Foundation.

I am ready to give all kind of support and co-operation for your all activities in Kathwadi village.



INTRODUCTION

Renewable energy sources such as solar power hold great promise to bring energy access to many households in India that are currently doing without it. India is blessed with tremendous solar potential and Solar power systems are relatively cost effective requiring minimal day-to-day intervention, which make them particularly suitable for use in rural India.

PROJECT OBJECTIVES

- To install solar powered Individual household electricity supply
- To train local youths on maintenance and repairs of solar power units
- To empower community to switch towards sustainable renewable energy model
- To facilitate individual and community management of the assets

PROJECT DURATION

Five years

63

PROJECT LOCATION

Manchegowdana Halli village, HD Kote Taluka, Mysore

MYSORE

MISSION / VISION / GOAL

To establish a demonstrable model of sustainable source of energy for lighting of individual house in a remote tribal village



ENVIRONMENT PROJECT: ENWA

NEED ANALYSIS AND PROBLEM ANALYSIS OF THE AREA

(Y

Manchegowdana Halli tribal colony is located at a distance of about 20km from HD Kote Taluk headquarters. The village has about 64 families in 58 houses with a population of about 260. To facilitate basic facilities such as safe drinking water and housing in these remote tribal colonies has been a challenge due to various barriers in the system such as the forest conservation act. Other challenges in terms of socioeconomic issues are poverty and the paucity of educated youth in the village.

Currently, the village has poor supply of electricity. There are only a few street lamps with no regular supply of electricity. And on an average, they have at least 18 hours of power cuts.

Even when there is power, the frequent voltage fluctuations is a challenge to its utility. These communities also face difficulties during the night when there is no light due to wild animal's interference and some potentially hazardous illegal activities. With the currently available infrastructure in the village, it is impossible to provide full range lighting system through the main line power supply. Therefore, the idea of installing solar panels in each household is a justifiable solution.

STAKEHOLDERS ANALYSIS AND DATA COLLECTION (PRIMARY, SECONDARY OR PRA)

The proposed project will include the following stakeholders who will be directly and indirectly responsible.

• L&T Technology Services: Will be responsible for technology support, project financing and monitoring.

• Swami Vivekananda Youth Movement: Will be responsible for implementation of the project, facilitation of the capacity development of users and maintenance workers. SVYM will act as linkage between other partners and community. SVYM will be involved with the individuals for monitoring the project progress and sending periodic report to LTTS.

• Vendor: shall be responsible for provision and supply of all the material required for installation, creation of necessary spare bank and training of local youth.

• Community Members: The individuals will own the solar equipment, maintain it and ensure project sustainability.

DATA COLLECTION

Primary data was captured by SVYM by conducting PRA at the village. As per the data collected, a total of 58 houses, one school and one anganawadi center have no electricity supply.



 $\widehat{\mathcal{G}}$

SWOT ANALYSIS

STRENGTH

- Enabling a non-conventional energy source
- Focused on the need of the Individuals
- Fulfilling the needs of the most marginalized and vulnerable families
- Adopting Individual managed approach

ENVIRONMENT PROJECT: ENWA

• Collaborative approach of all partners including end users all through the different phases of the project such as planning, designing, implementation and monitoring

WEAKNESS / CHALLENGES

- This is not a hybrid system. Hence rainfall and cloudy weather contribute to poor recharge of batteries usually up to 2 to 3 months in a year
- As it is fully managed by individual families, long term need for facilitation cannot be discounted

• Relatively high replacement costs and battery management to be borne by the Individual

OPPORTUNITIES

- Individual family's willingness to support and sustain the project
- Willingness of Individuals for implementation of the project
- Availability of NGO facilitation

THREATS

• Vested interests of local contractors

• Rapidly changing technologies in Solar power system forcing non availability of spares for repair and maintenance



ENVIRONMENT PROJECT: ENWA

NETWORKING AND COLLABORATING AGENCIES

- Gram Panchayat
- Local NGOs and CBOs
- Community leaders
- Self-help group and federation
- Vendors
- Government departments- Health and Education

OUTCOME

- Demonstrable model of Individually managed sustainable source of energy for lighting of households in a tribal village
- Upliftment of the living standard within individual families
- · Livelihood opportunities created for tribal youths in non-conventional energy sector

SUSTAINABILITY OF THE PROJECT

Individual family members will be the main stakeholders and they would be engaged in the entire process of project plan, design, implementation, maintenance and monitoring. This ownership by the Individual is expected to not only ensure acceptance, usage and safety of the installed equipment, but also minimize payment defaults.

During the Third Year of the project, a village level committee consisting of 13 members will be created to take charge of the assets and to oversee its care including collection of subscription for maintenance.

The place for establishing a spares bank shall be created and managed by the committee itself. All households shall pay an initial cost followed by small monthly fees.

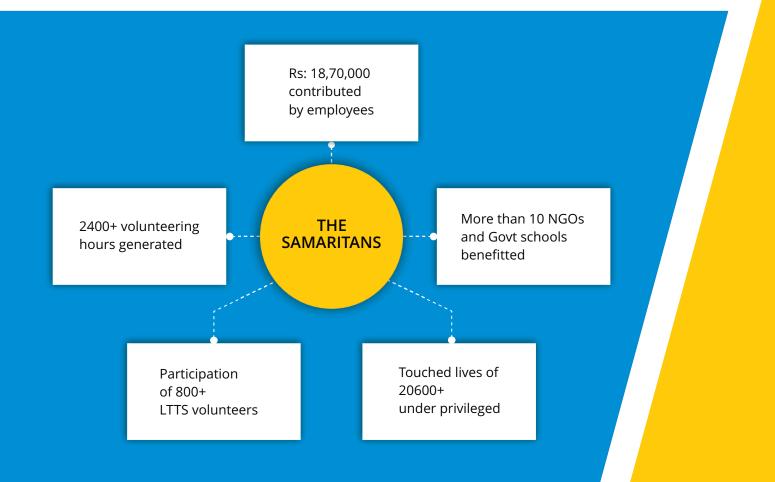
This amount will be used to pay the trained youth who will carry out repair works and maintain spares bank. Everyday maintenance of the panels, battery and management of the feeder lines when necessary will be the task of these trained youth. They will continue to remain available on call as required.



National events at orphanages and NGO

Conservation of environment and tree plantation drive

THE SAMARITANS



CSR CHAMPIONS ACROSS LOCATIONS

Bengaluru	Vadodara		
Girish TG	Nirav Sanchaniya		
Chennai	Mysore		
Vivek R	Latha Omprakash		
Hyderabad	Mumbai		
Prerana Jha	Pradnya Padwal		



THE SAMARITANS

Distribution of school uniforms



Distribution of education materials



Employee participation and sale of products

Donation of school kit



Distribution of education materials









L&T Technology Services CSR Report 2017

Project Spent for FY 2016 - 17

S. No	CSR Project or Activity Identified	Sector in which the project is covered	Project or programs Local area /the state/ district were program was undertaken	Amount Outlay to project (Budget) project or program wise	Amount spent Direct Expenditure on projects or programs/ Overheads	Cumulative expenditure up to the reporting period	Amount Spent: Direct or through implementing agency
01	Support Technology Incubation to CREATE project at IIT Madras	Innovation and Technology	Chennai	62.80	62.80	62.80	IIT Madras
02	Support Technology Incubation to traffic monitoring project at IIT Madras	Innovation and Technology	Chennai	42	42	42	IIT Madras
03	Establish Mini Science lab & E-Learning centre	Education	Mumbai , Baroda and Hyderabad	48.56	29.93	29.93	Aarambh, Arch Social Consultant, STEM Learning and Engineers Without Border(EWB)
04	Skill Development in Beauty therapist, automotive technician leather stitching, home appliance repair, Tailoring ,computer courses	Skill Development	Chennai, Mumbai , Baroda and Bengaluru	111.12	89.27	89.27	LabourNet, Aarambh and Arch Social Consultant
05	Mobile eye surgical camps	Health care	Chennai	37.5	37.5	37.5	Sankara Nethrayala
06	Watershed	Water Conservation	Pune	198	74.15	74.15	National Agro Foundation (NAF)
07	Renewable Energy project	Environment	Mysore	55	24.6	24.69	Swami Vivekananda Youth Movement (SVYM)
			TOTAL SPEND (INR Lacs)	554.99	360.27	360.27	



Participation from the Leadership Team

















L&T Technology Services CSR Report 2017

















L&T Technology Services

Address: L&T House, N. M. Marg, Ballard Estate, Mumbai-400 001,Maharashtra, India For details contact CSR Team: Aruna Ranganathan - aruna.ranganathan@Lnttechservices.com Sameer Anup Minj - SameerAnup.Minj@Lnttechservices.com

