



FRIEND IN NEED INDIA TRUST

Annual Report 2016

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1. Introduction

What a way to end 2015 and start 2016! We were delighted to learn that Prof. Dr. Shyama Ramani, Founder of FIN India, was the Woman Achiever in the category ‘Hygiene & Sanitation’ as one the 100 Women Achievers of India of 2015, of a contest organised by the Ministry of Women and Child Development, Govt. of India in collaboration with Facebook. This was indeed a huge honour and a validation of the work done for the last 11 years.

FIN Trust would like to thank each one of you who voted for Prof. Ramani’s nomination and for the support that the organisation has received through the years. This award and recognition has given us all an impetus to reaffirm our commitment and to continue our work towards building better WASH (adequate and safe, Water & Waste management, Sanitation and Hygiene behaviour) capabilities in India.



organisation Sti4change.

It was an exciting day for FIN Trust when Prof. Shyama Ramani along with the other 99 #100women achievers were invited to have lunch with the Honorable President of India, Shri Pranab Mukherjee at the Rashtrapati Bhavan on 22nd January, 2016. In a well conducted event, Prof. Ramani along with the other winners received a citation recognising her work in the area of 'Sanitation & Hygiene'. On behalf of FIN Trust, we want to thank everyone who have been so supportive of Prof. Ramani & the work FIN Trust has done along with its sister research





[Paranjothi Singaravelu](#) இந்திய அரசு நாடு முழுவதும் 100 சிறந்த பெண் சாதனையாளர்களை தேர்ந்து எடுத்தது. இதில் எங்கள் தொண்டு நிறுவனத்தின் நிறுவனர் & இயக்குனர் திருமதி டாக்டர் ஷ்யாமா ரமணி அவர்களுக்கு சிறந்த பெண் சாதனையாளர் விருது கிடைத்துள்ளது . இந்த விருது கடந்த 22-01-2016 அன்று ...[See More](#)[See Translation](#)



[Friend In Need India](#) Dear Paranjothi, Nothing would have been possible without the support and help you have given me since the last 10 years. Words cannot express my heart-felt thanks. We will succeed in making Kameshwaram village as clean as any in the world. Thank you so much ! With best wishes, Shyama



[Friend In Need India](#) Totally agree Shyama. Paranjothi Sir has been our backbone!



[Sandhya Thirunagari](#) Hurray Prof!!!! Just so so glad!



[Friend In Need India](#) Thank you so much Sandhya!

2016 was a year of innovation for FIN in terms of organizational structure, evolution of identity and further refinements of mission. There was a lot of experimentation, with most of them being successful but not all. By the end of the year, we had a very clear road map and at last a good conceptual framework that explained our work! We summarize each of these points briefly, outline our main achievements and activities, and then present our budget.

2. Frugal Innovations developed in Kameshwaram

The main achievements of the FIN Kameshwaram team were mainly in innovation generation as follows. We created a number of grassroots, frugal, base of the income pyramid - design and social innovations in the context of sanitation and waste management

- Frugal means – that they are a no-frills product.
- Grassroots means that they are co-created with a community.
- Base of the income pyramid - means they can be applied in the context of deep poverty.
- Social means that they are meant to trigger behavioural change or create social value (or shared value say through better environment for all).

Household garbage tins

For example, we are recycling old kerosene tins into waste bins for non-biodegradable waste that can be kept outside the house.



They are particularly used in the fishermen colony where houses have been built close to one another.



Community Waste Bins An example of a community waste bin given to the village under the SWACHH Bharath Programme is shown here. Five such bins have been given for the huge area of Kameshwaram of about 936 hectares. Each costs more than 20,000 INR. They are very heavy and one has to bend to open it. One has to get one hands on the waste to remove it properly. After volunteering to clear waste from one of these bins, Trustee Raji Srikant remarked:

“The door of the bin is heavy and difficult to open. I was very afraid that the door might get unhooked and perhaps fall on my back. I found it difficult to keep bending and taking out the waste.”

In contrast, our waste bins are easy to open and workers can easily fill their garbage bags with the waste. (Note: Manual waste picking is still followed in villages. No modern equipment or heavy machinery is involved). Stickers on three sides of the bin nudge passersby to use the bin instead of throwing rubbish on the ground. It has increased visibility and its simple yet efficient design makes it eye-catching, tempting the people to use it.



Community Innovation – Art for behavioural Change

In villages, besides the temples there is usually no art. In the place of art, besides temples, there are posters of politicians, posters to herald life time events, or the performance of school children in state or national exams and finally, in the form of effigies for religious festivals that are either put in the sea or burnt. There is no art that is there to express the creativity of the locals. Thus, I wanted to use art as a medium for behavioural change.

For this we chose the bus stop opposite the FIN office. This central bus-stop of Kameshwaram is very dirty and always filled with posters. There is always garbage all around. What about getting a school to take it up as an arts project? What about mobilizing school children to paint the bus-stop? Their names can be painted on the bus-stop. Then surely no one would put posters on it. By March 2016 – an interested school was identified by Mr. Paranjothi – The Chinmaya Nanda Mission School in Nagapattinam. They came to kameshwaram for a workshop.





They were very enthusiastic to learn about WASH. On the spot they came up with brilliant skits to teach about WASH behaviour. The students and teachers saw an ecosan toilet and the school director, Mrs. Bennet agreed to collaborate.

So first the bus stop was cleaned and the broken bits were fixed by FIN Masons.



Then the children of Chinamaya Nanda Mission school came with their art teachers and painted the bus stop beautifully.



Fin staff worked with NAREGA workers to clean up the surroundings of the bus stop.



The transformation of a local bus stop by the students of the Chimaya Nanda Mission School in Nagapattinam amazed all. This community led initiative by Friend In Need led local villagers to find a newfound pride in a public space and hence pride in their own village.

The names of the school children are painted on the bus-stop. For the first time in the history of the village this bus stop remains beautiful and clean and serves as a proud testimony of its commitment to the hygiene of its community environment.



Before



After



Shyama spoke about our summer project in the Pecha-Kucha event organized in Maastricht University to celebrate its 40th year anniversary - Simple as ABC, Art for Behavioral Change!

<http://www.pechakucha.org/presentations/simple-as-abc-art-for-behavioural-change>



3. Visitors to Kameshwaram



The FIN India team came to Kameshwaram. None of them are from Tamil Nadu, and none of them speak Tamil, but their friendliness and blending in Kameshwaram made them much loved and popular!



In September we had a visit from a pair of dynamic architects Nikita D'Silva and Siddhant Tikkoo - the founder directors of the firm Stand.

While promoting the Eco-San model for rural sanitation, we had found that it was not at all easy to get people to accept it. Therefore, we conducted a survey, compiled a list of its shortcomings from a user's point of view and reached out to the innovative team at STAND and asked them how the design of the Eco-san toilet model could be improved?



Here's what Nikita and Siddhant had to say - after seeing the ecosan toilets in Kameshwaram :

- The EcoSan toilets have close to zero smell and this is great.
- The space taken up by the 2nd pan is rendered useless whilst the 1st pan is in use.
- There is a strong need for more natural light to enter the toilet block.
- There is high corrosion of external plaster and paint due to high salt content in prevailing winds and proximity to the sea.
- However there is no current re-use of urine and wash water by the households.
- The current use of asbestos roofing is not a very sustainable or durable option.
- There is a need to standardize the height of chamber and pits by standardizing the riser height of each step
- There is a need for the use of 2 sets of piping, one set for each chamber, to prevent clogging.
- The current guideline of using plastic caps/lids to seal or cover the fecal chamber is not being carried out correctly.
- There is an improper sealing of used chamber from the outside after removal of compost, that could lead to infestation.
- Painting of the inside and outside of toilets is improper.

4. Videos made in Kameshwaram

While in Kameshwaram the FIN team shot some videos about Friend In Need india. Rushva edited and directed them and did an excellent job of it. All FIN team members spoke very well.

- Systemic challenges faced by Indian Villages.

<https://www.youtube.com/watch?v=XSQuqepANvw&feature=youtu.be>

- Village Ponds, whats unique about them?

<https://www.youtube.com/watch?v=ATaURJKrKu0>

- Challenges linked to access to water and the work FIN Trust is doing for this issue.

<https://www.youtube.com/watch?v=aa0fIGV4iJI>

- Policy challenges related to the implementation of sanitation drives and the work FIN Trust is doing to combat those challenges.

https://www.youtube.com/watch?v=vzM_jDKnlIE&feature=youtu.be

- Challenge of waste management in India and what FIN Trust is doing to help solve the issue.

<https://www.youtube.com/watch?v=9eNOYc0pA10>

- Another perspective on waste management in Kameshwaram from a FIN intern

https://www.youtube.com/watch?v=0-xz_3pN7_Y



- What working on Kameshwaram means to a long time associate:

<https://www.youtube.com/watch?v=IuElSe8GHMI&feature=youtu.be>

- The FIN team in Kameshwaram with whom everything is co-created

<https://www.youtube.com/watch?v=AV4YIFCObjk>

5. Our Volunteers

Volunteers – Shanmugarajan – Excerpt from Facebook post

"Hi, I'm Shanmugarajan, a 22 year-old software engineer based in Chennai working for Global Analytics. "Another software engineer in the country!?" you'd think, but wait, read on. I'm much more than just a software engineer! When I'm not a software engineer, I'm a passionate teacher, a recreational runner, an avid football fan and a fitness freak. This article is the missing piece of art that completes the gallery of my life, which my resume will not speak about.

Why do I love teaching? Because teaching isn't a profession, it's an art! During my higher secondary years, I started to genuinely love a few subjects that I'd hated, because of the teachers who 'discussed' it. Yes! I realized that great teachers 'discuss' the subject, making me embrace and fall in love with it and don't just teach them. This made me want to become a good teacher and explain 'how' a phenomenon takes place rather than just asserting 'what' the outcome would be. I wanted to share the fruit I'd received, so that the seeds I sow grow into trees one day. I want my teaching to open gates and make a difference in the lives of students who don't have access to proper guidance. All these thoughts made me determined to teach underprivileged students. I started teaching math in a diploma college that admits only the less privileged and was enthralled by the amount of potential that was untapped in them. Then I started teaching computer science, to help students land in a job they desire. Hunting answers for weird questions that pops up from the sea of inquisitive students made me fall in love with teaching even more! One can never put a price tag on the joy I feel when I see my student's face glow out of pride from discovering an answer to my question through reasoning.

I'd accumulated weight over the first three years of college, thanks to the delicious meals served at my college canteen and the blissful sleep that followed during the class lectures. Stepping on a weighing machine, rang bells in my head! And no points for guessing my next step – I signed myself up for a gym. A low-carb diet coupled with morning jog/walk helped me shed 15 kgs over a period of 6 months. I would be lying, if I told you that it was an easy



routine to follow. But my determination and passion to get fit superseded my laziness. Hard work always pays off. I took the daily jogs to the next level when the running bug bit me. Inspired by my colleagues' Facebook posts, I registered for a 10K running event (a 10km running contest). Running cast a magic spell

on me and it's difficult to escape from its seductive clutches! I started running 10K races and now I run half marathons. I realized that mental ability and determination is more important than physical strength. The selflessness, sense of pride and mental strength that this sport promotes has an unparalleled effect on my lifestyle, not to forget the confidence it imparted in me. What started as a fitness routine has now become an integral part of my life!

Football is something that makes the weekends even more interesting. Nothing could be more exciting than watching my favourite striker slam a goal into the net, tearing through the keeper's gloves or watching my favourite defender shielding his goal post in front of his opponent as though his life depended on it. The ups, downs and drama throughout the 90 minutes on the pitch and the transfers & mind games off the pitch provides entertainment and an exciting experience which no other sport could match. I'm a follower of the English Premier League and an ardent supporter of the Arsenal Football Club, for the classic game they play that matches my style. London is always red!

Oh wait! I hear you. "What is this software engineer doing in Friend In Need? What's his role in the organization? How does this stint serve his life's purpose and what are his aspirations?" I'll save these details for the subsequent posts that follow ;)"

Stay tuned for more from Shanmugarajan. Cheers!

Chloe Sorel January-April 2016

Can you introduce yourself please?

My name is Chloé, I am 22 years old and French! I love travelling and meeting new people. I just completed the first year of my master's program in Economics and Public Policy at Sciences

Po Paris. I am currently in the middle of a gap year, trying to figure out how to have the greatest impact on people's lives.

Throughout my studies, I managed to conciliate my interests for economics and social sciences. I strongly support the idea that economics is a very powerful tool to understand and change the world, but within the framework of a multi-disciplinary perspective. I enjoy my studies but I also strongly need to see their application in the real world.

I first made a research internship at the French Development Agency, under the direction of its Chief Economist, Gaël Giraud, working on money velocity. For my second internship, I wanted to discover an action-research based venture such as Friend In Need, in order to discover another kind of research, more directly linked to the ground.

What are you doing with Friend in Need?



I first heard about Friend in Need's action through my master's friend Lucile, who explained her work to me. I applied for an internship the day after!

I am very interested in the impact assessment of a project or of a policy, from the data collection to the data analysis. I am particularly concerned about health, education and gender issues, which is why I consider sanitation coverage as a priority.

Friend in Need also caught my attention because of its desire to document and question its achievements. I am very interested in experimental economics and find it great to draw lessons from the field! I am involved in various tasks during this internship, such as data collection, data analysis and communication.

What makes you interested in doing all this? Why do you think it is worthwhile?

I am so lucky in my own life: I have everything I need, which is why I can and have to share some of my luck! If some of my competences can improve one's life, then I will be even happier. I have been involved in several solidarity projects during my school years. A few years ago, I was the president of the non-profit association Afric@ction. We organised several solidarity events during the year and a trip to Senegal (one month), to work in a school. I am deeply convinced that volunteering helps to be a better person, being able to confront diversity and to make the best use of it.

To be an intern at FIN is also a wonderful opportunity for me to meet inspiring people with different backgrounds and from different parts of the world, as well as to discover some parts of the Indian culture. In less than two days, I'll be flying to India: I can't wait!!

Later on Chloé talks about her experiences in India



One month ago, before leaving for India, Shankhajit told me that India is a “crazy-but-in-a-nice-way” country. I felt very excited but also a little apprehensive: I was about to spend one month with three boys I didn't know, in a country I didn't know. I was clearly out of my comfort zone and ... it felt great!

Now, let me tear away some prejudices about India!

1. It is very dangerous to be a woman in India.

To be honest, even if travelling through India has always been a dream for me, I did not know what to expect in terms of safety: the French news so often report acts of violence against women!

Of course, violence against women is an issue in India. But I felt so safe and respected there, and even more than in Paris sometimes! So I feel that violence against women is NOT part of the Indian culture at all.

2. All the foreigners fall sick (stomach problems!) after three days in India.

I am very proud to say that I didn't! I was careful with water but I enjoyed the great variety of food, even in the street sometimes!

3. India is only about poverty.

There are too many people living in extreme poverty in India and this is very shocking. But on the other hand, many people enjoy a nice quality of life, even in very isolated villages. And this may sound naive, but people I met were so rich in terms of food, family ties and culture!

4. India is only about overpopulation.

You may be stuck in a traffic jam several times a day in big cities and too many places are overcrowded! But India is much more than these cities: I had the incredible opportunity to spend one week in the Nilgiri mountains, a range of blue mountains in the western part of Tamil Nadu. One night, we spent a stunning starry night in a place called "Wild heaven": with Dev, we could share one unique moment with tens of deers, trying to approach them. This was one the greatest feelings of my life: just the two of us in the middle of wild life.

5. Indian food is very very very spicy.

Ok, this is not always wrong: in an Indian restaurant in Paris, they would probably draw at least five little chilies to indicate how spicy most of Indian meals are! But once I got used to the spices, I enjoyed the great diversity of food with gusto! And Indian food also offers a lot of sweets! I really need to find out a nice place to eat jelabis in Paris!

Everyday was different: I experienced very different ways of travelling, from the nice and big AC car to the simple sleeper class in the train, visited a lot of villages, discovered the real field work, through dialogue with people and observation, met great people, got the best introduction to Bollywood movies and songs, was very jealous of the monkeys spending their lives chilling in the forest, realized the importance of building an open and trusting relationship with the villagers we try to help, and many more...!

What struck me most during this trip was the Indian diversity: all these colours, road vehicle horns, smiles, climates, cultures, languages, meals, landscapes... I am also very happy to understand better the meaning of Friend In Need India: this amazing country still faces great challenges.

Zoë Heritage July-September 2016

"Hi, I am Zoë Heritage and I was born in England on a sheep farm. After spending a few years working in Africa, I married a French man and I have been living in Rennes, France for the last 20 years. I have always worked in the field of public health (population health, prevention and health promotion). I am currently running a small French NGO that supports the development of healthy public policy in 85 French cities by working with local city-level governments. It is part of the WHO Healthy City movement, and there are similar networks of Healthy cities in other European countries and elsewhere. In Europe, we cover 1300 cities in all.



I have taken 3 months leave from my job to live in Kameshwaram and support Friend In Need's work in this coastal village. For those of you who don't know Kameshwaram, it is 9 hours south of Chennai, near to Nagapattinam. I will be involved in supporting the permanent FIN office staff to develop their English and computing skills, composting and improving neglected, unhygienic public spaces.

I decided to volunteer for Friend In Need for 2 reasons. Firstly, I hope that my experience of running small NGOs in the health & hygiene field can be of some help to FIN. Secondly, now that my 3 children are grown up I wanted to do something for me, to have a new challenge and learn about a culture that is different to my life in Europe. I have already been welcomed very warmly into the FIN family and I would encourage other people who have life skills to support FIN's valuable work."

Welcome Zoe to the FIN Family!

| Name of volunteer | Work done |
|-------------------|--|
| Shanmugan | <ol style="list-style-type: none"> 1. Accompaniment of FIN Kameshwaram team through visits time to time and discussions about planning the work. 2. Helping in the organization and implementation of workshops in Ooty and Kameshwaram. 3. Accompaniment of FIN Kameshwaram team to Delhi for the World Toilet day conference |
| Chloe | <ol style="list-style-type: none"> 1. Accompaniment of FIN research team in focus group discussions in the Nilgiris district. 2. Statistical analysis of school survey conducted by Sangeeta Venkatesh. 3. Presentation along with FIN team on school sanitation in the Indian Institute of Science, Bangalore 4. Analysis of data on toilet construction compiled by Dr. Ramani. |
| Zoe | <ol style="list-style-type: none"> 1. Accompaniment of FIN Kameshwaram team and analysis through direct observation and interaction – Report 1 of Zoe 2. Testing out of Pro-poor innovations – the sand fridge – Report 2 of Zoe 3. Organization of the bus painting project – Thanks so much Zoe! 4. Creation of a garden in front of the FIN office 5. Teaching about the process of composting 6. Supervision of a research project on women's entrepreneurial development undertaken by Susila and Ponnumani of Bharathi Dasan University 7. Analysis of the waste management data compiled by Sumathi 4. Helping in the organization and implementation of workshops in Ooty and Kameshwaram. |



6. Workshops in Kameshwaram

Tracing Pathways to clean villages: Uncovering the nature of “SWACHH” , August 26, 2016, NAREGA Building, Kameshwaram

The objectives of the conference was to contribute to the capacity building of local Panchayats through presentation of results of FIN team on Tamil Nadu, Gujarat and Sikkim – compiled as part of a research project for the NCSTC, Government of India (see section 9), introduce a new technology developed to combat water shortage and to present the FIN frugal and social innovations to visiting dignitaries such as: MLA: U. Mathivanan (Kivalore MLA), Thamimun Ansari (Nagapattinam MLA) and P. Sankar, Project Director from the District collectors office. The program was as follows.



10.00 – 10.10 AM : Welcome by Thalaivar Kanagasundarm Panchayat Head and S. Paranjothi, Field Manager, Friend In Need India

10.15 – 10.45: What is meant by Swachh Bharath? What are its indicators? With direct photo evidence from research on Tamil Nadu, Gujarat and Sikkim by Shyama Ramani, Shankhajit Sen, and Rushva Parihar

10.45 – 11.00: Questions and Answers with welcome drink to all in Kameshwaram village conference hall

11.00 – 12.30: **Nudging behavioural change:**

- Inauguration of bus stop redone by students of Chinmaya Nanda School,
- Examination of public waste bin in different sites
- Visiting fishermen colony to understand bin to facilitate village waste collection system

12.30 – 1.00: **Presentation of a machine that can make water from atmospheric machine** from Water Makers India – with questions and answers

1.00: Vote of Thanks by Raji Ramani Srikant, Trustee, Friend In Need India

1.00 – 2.30: Lunch



The bus stop was inaugurated by the visiting dignitaries, who were all very impressed and highly commended it.

Further Diffusion:

Tamil

Press: <https://www.youtube.com/watch?v=ko0bR-OVWBE>



A commercial innovation that were showcased was a machine that can make water from the atmosphere. Meher Bhandara Managing Director of WaterMaker India said, “We are thrilled to be able to present and demonstrate our unique air to water technology to give Kameshwaram clean and safe drinking water from air. This is an innovative solution for many part of India that are struggling with a crisis for safe drinking

water.”

The water maker was installed in the premises of the conference and it produced water. On discussing with the Panchayat – and these are the six main points that emerged.



1. It is clear to all that the machine is of great value.
2. However, the cost of 12 lakhs (if memory serves me well) is daunting to the Panchayats as they are cash strapped.
3. People aren't willing to pay for water. They want it free.
4. No private group is willing to buy the machine and generate their livelihood from it.
5. Still there are lot of creative solutions that can be thought of. For instance, if 1200 households make a contribution of a 1000 Rs each - then the 12 lakhs can be paid. I don't remember the water generation capacity of the machine. Then I guess they would have to pay some every year for maintenance, security etc. Then after the fixed investment - they can all have access to water. We need to work out the calculations.
6. Proof of concept has to be established. This would mean probably investing in running the machine in a village over a period of time - so that all associated challenges can be taken care of. At the moment there is uncertainty - we cannot imagine what these challenges could be before trying it out. For instance, even for the one day demo, there were hitches. Villages do not have high or constant voltage levels and a creative solution had to be found in the village (they hooked it up to the village mains) so that water could be made for the demo.

In short, we have to think more.



7. Publications based on work in Kameshwaram

- Ramani, Shyama V. , Timothée Frühauf & Arijita Dutta, 2017, On Diarrhoea in Adolescents and School Toilets: Insights from an Indian Village School Study, The Journal of Development Studies, DOI 10.1080/00220388.2016.1277017
- Ramani, Shyama V. , Shuan SadreGhazi & Gupta Suraksha, 2016, Catalysing innovation for social impact: The role of social enterprises in the Indian sanitation sector, Technological Forecasting and Social Change, doi: 10.1016/j.techfore.2016.10.015
- Shyama V Ramani titled '*Why it's easier for India to get to Mars than to tackle its toilet challenge?*' The Conversation [November 19, 2016]
- ✓ Subsequently the same article got reprinted in 19 other digital newspapers including prestigious ones like the: The Huffington Post (USA), The Wire (India), Down to Earth (India's leading environment magazine), .Sri Lanka Guardian, Khaleej Times (UAE) etc.
- C. Susila, M. Ponnumani, under supervision from Dr Zoë Heritage, 2016, Women's Entrepreneurial Development, A study of Kameshwaram.

8. Pro-poor innovations tested in Kameshwaram

As part of our Kameshwaram as living lab activities, we also test out pro-poor innovations. Thus, these are the results that we obtained on a 'sand fridge'. The experiments were conducted by Zoe Heritage and Paranjothi.

The sand fridge was first transported from Coimbatore and one of them cracked in the process. Then it was made functional by putting in the sand.

Making the fridge – Putting sand in between the
inner and outer clay pots



Damp sand put in the bottom of the outer container, the inner container placed inside, and more sand packed around



Removed possible air pockets and ensured the sand was really damp. It was not easy to avoid water getting into the inner container



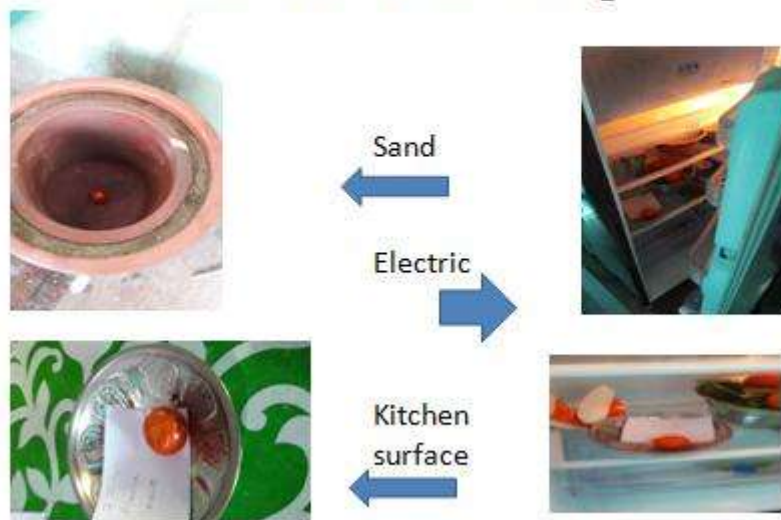
Put the food in, then placed the inner and outer lids on. Left fridge on a shady outside terrace.
1litre of water added daily to sand



To test, we took 3 tomatoes



We put a tomato into the electric,
sand and in 'no' fridge



After 10 days

- No change in any tomatoes – failure ! So we tested other foods !



- Generally foods were slightly prolonged in the sand fridge, but electric was still much better.

Results

- The food tests showed the sand fridge slightly preserved some food. It keeps water bottles colder than outside, but milk went sour.
- Sand fridge costs 3000 Rs (40euros) and has no running costs, apart from water added daily to sand
- It is quite fragile and easy to crack.
- It is easy to put together in home, but is heavy so can't be moved. Many ants bred in the damp sand.



Conclusions

- At 3000 Rs the sand fridge is too expensive and too fragile to be attractive.
- **It should only be promoted if a local manufacturer** can be found to reduce costs.
- If made, remove tap in the front and the space between the 2 pots should be enlarged to make watering easier.

9. Research conducted outside of Kameshwaram

The project 'Incentivising the provision of rural sanitation through 'sustainability audits' for the NGP programme' was approved by the National Council for Science & Technology Communication, NCSTC, Department of Science and Technology, Government of India, to run from August 2015 till December 2016, with five main objectives:



1. To study the situation of health and sanitation in rural areas of India, with focus on Nirmal Gram Puraskar (NGP) winning villages and their performance in terms of sustainability.

2. To identify the best practices for sustainability and to spot the drawbacks that might lead to an unsustainable development.

Moreover, to identify the challenges of those not eligible for NGP prize, and understand why these challenges could not be overcome and possible solutions to break these deadlocks.

3. From the above exercise, to develop a standardized audit tool that can be applied on an all India basis. This will help in scientific and observable evaluation of the current state and identify the relative advantages and disadvantages of different regions. Panchayats can use this tool for self-evaluation to be acquainted with the state of Health and Sanitation.
4. To validate the audit tool with Panchayats and other decision makers. These workshops are also intended to help Panchayat staff explore how their frugal resource bases can be mobilized towards improving or sustaining sanitation usage through social action within villages.
5. To give recognition to NGP village winners who have been able to sustain well maintained and well used toilets and especially usage by men, by awarding them the title - 'Vimal Kshetra'.



The method applied for achieving above objectives in brief:

1. Audits of 30 villages, 10 each in Tamil Nadu, Gujarat and Sikkim through discussions with: (a) villagers (Focused Group Discussion) (b) Panchayat

President/ Member/ Head (Interview) (c) Participatory observation (Direct Photo observation).

2. We also interviewed State level policy makers and policy implementers to understand how the NGP selection and monitoring process is designed and implemented.
3. We developed a comprehensive audit tool (In the Annex) for NGP selection and NGP status sustainability from the above. That will be an ergonomic mathematical tool, which can be used in/as a software interface for easy usability.

10. Workshops and held outside Kameshwaram



1. **“On studying development as an evolutionary process of catch-up with illustrations from the WASH sectors”. February 17th, 2016, Indian Institute of Science Bengaluru.**

FIN Members participated actively in this UNU-MERIT external workshop event. First, Prof. Ramani explained the conceptual frameworks of catch-theories and how they could be used as tools for research, strategy making and policy design. The key ideas of the lecture included: role of science, systems, systems of innovation, micro vs macro, role of complexity, inductive vs. deductive approach, usefulness of game representations, role of models, evolutionary economics as a lens to understand the world, economic development, complexity of the WASH sectors. Then Dev Saha explained the sanitation system technologies; Sangeeta Venkatesh, Anu Govind and Chloe Sorel presented their results on the WASH strategies of schools. This was followed by a discourse on the catch-up paths of villages towards ‘Nirmal’ status by Shankhajit Sen, and finally the session was by Rushva Parihar explaining why it should matter for firms to play smart in WASH interventions.

2. Tracing Pathways to clean villages: Uncovering the nature of “SWACHH” , August 20, 2016, RDO office, Ooty



The objectives of the conference were to contribute to capacity building of Panchayats through a presentation of the main results of the research by Prof. Ramani on 20 villages of the Nilgiris district and discussing how existing problems may be tackled. The five main results of the study were as follows.

Firstly, there is an enormous heterogeneity of WASH infrastructure and capabilities between regions and within regions – even though there are some common challenges. The three common challenges are: the practise of open defecation, poorly constructed toilets that start deteriorating or malfunctioning after a few years and lack of knowledge or facilities to dispose of stools of babies which cannot use toilets.

Secondly, poorly constructed toilets and unhygienic disposal of baby stools – referring to lack of quality construction and lack of education and motivation – are key predictors of WASH disease incidence. Furthermore, open drainage attracting flies and vermin was found to be a significant predictor.

Thirdly, what is required for immediate remedial measure at household level may not be the same at the village level and vice versa.

Fourthly, ownership of toilet is not sufficient to ensure its usage. There is also open defecation by choice.

Fifthly, lack of WASH infrastructure and capabilities are not perceived to be the only central problems of isolated communities. In order to have a larger impact and be adopted more efficiently – they have to be embedded in a larger solution.

**3. Tracing Pathways to clean villages: Uncovering the nature of “SWACHH” ,
Lemon Tree Hotel, Ahmedabad, 434/1, Mithakhali Six Cross Roads, Ahmedabad
380006, Gujarat on the 15th November, 2016.**



This was an UNU-MERIT external event that was co-organized with FIN Trust. The morning programme focussed on capacity building for Village councils or Panchayats. An audit tool developed by the Friend In Need India team called ‘Swachh Suchak’ (meaning Cleanliness Self-Evaluation) under the DST project was presented to Panchayats and the members of the DRDA from various districts.

The tool was found to be useful. However, we had applied it on data gathered under an European Project, MNEmerge and the district representatives of DRDA noted that the data seems to be faulty. Thus, we need to apply it on credible sources of data and analyze the results.

There were also discussions about common challenges faced in rural India and exchanges on best practices. We listened to the Panchayat members and brainstormed for solutions. The conclusion was that for a Swachh Bharat we must induce behavioural change such as usage of toilets and non-littering of public places. Otherwise no program will ultimately work.

The evening programme was designed for citizen groups and students interested in gaining a larger perspective on the different dimensions of the Swachh Bharath Mission (SBM) or Clean India Mission and associated emerging issues. Participants mentioned that they had learnt a great deal. Many of them were from activist groups and we were also happy to note the diverse initiatives taken.

There were 45 attendees in the morning and 50 in the evening. Distinguished guests included Dilip Joshi (Special Commissioner - Swachh Bharat Mission, Gujarat) and Panchayat representatives from the villages of Karela, Bhuva, Haldarwa, Zantor, Angareshwar, Anklawadi, Nava sabarkantha, Akodra, Punsari. The total representation from government/ public agencies, Private/ Corporate sector/ agencies and academia were 50 %, 30% and 20% respectively.

**4. Pathways to SDG6: Macro to Micro Perspectives,
19th November 2016- World Toilet Day Conference, Venue: India Habitat
Centre, Tamarind Hall, New Delhi**



This was an UNU-MERIT external event that was co-organized with FIN Trust. The conference was a success as it accomplished four distinct objectives that were identified for the conference at the outset:

1. Honor the Change Makers of Indian Villages identified through the Project “Incentivising rural sanitation through sustainability audits” Funded and initiated by DST, Govt. of India.
2. Contribute to a much better understanding of the pathways to SDG6 and the role of policies.
3. Identify the major areas of debate on Technology, Innovation and their governance for the Attainment of the SDGs and WASH sector en bloc.
4. Identify the shortcomings of the Indian NSI vis-à-vis SDG6 and propose solution outlines to try out.



The continued debate on SDG6 from multiple perspectives helped understand the pathways to the SDG6 for India. Findings from the dialogue initiated can also be useful for other countries to learn from. Representatives from Africa who attended the conference were in agreement about the same. We were unable to inaugurate apps for SDG accompaniment during the conference but instead proposed a different solution for engagement with the audience. In order to ensure all ideas are heard and understood clearly, all attendees were given a post card to write out a solution for SDG6. UNU-MERIT received many solutions from different stakeholders.



was working towards the same goal.

One of the unique features of the conference was the nature of the audience. There were diverse stakeholders, all working towards the same goal of SDG6. This allowed for focused dialogue that included different perspectives. 130 people registered to attend the conference. One of the attendees pointed out that there was great learning, because different actors in the system were able to hear each other out and understand the other's perspective, as everyone



Honouring the Change Makers: The Vimal Kshetra Winners

Increasing awareness about our Change Makers – Creation of the Vimal Kshetra Award by Friend In Need India :



The central objective of the Swachh Bharat Mission (SBM) or Clean India Mission is to eliminate open defecation in India through installation of toilets and triggering of behavioural change. Yet, we know very little

about the parameters of these processes, their governance challenges or the pathways being experimented with. This indeed is the research focus of Friend In Need India and we identified during the course of our research during 2016 some remarkable individuals who are visionary change makers. To honour them FIN has created the 'Vimal Kshetra award'. The first set of these visionaries were awarded the Vimal Kshetra award for 2016 at our World Toilet conference. The award was given by the UN young leader for SDG6 Samuel Malinga. The winners were as follows:



The winners were as follows:

- Himanshu Patel, Panchayat Head of Punsari Village, Punsari, Gujarat. (photo above)



•Anil Raj Rai, Head of Swachh Bharat Mission, Sikkim.



• N K Perumal, Rural Development Organization, RDO Trust, Ooty, Tamil Nadu.

•

Mohammed Ataulla Khan and Allirani,
Principal and Teacher of K.K. English
School, Bangalore, Karnataka



11. Discussion of weaknesses and failures of the year – steps towards improvement

Zoe Heritage was requested to summarize the weaknesses of the FIN Kameshwaram team on the basis of her observations compiled during her stay. She noted that Mr. Paranjothi was a real pearl and totally dedicated to the organization and to the cause. However, he simply did not have enough people to help him. Currently there is 1 full time staff, 1 part time and 1 paid to be concierge who does not do anything. Mr. Paranjothi is the full time staff and he cannot be doing all these things. So the main weakness of the village according to her is the lack of personnel for the diverse activities undertaken by FIN Kameshwaram.



FIN activities as noted by Zoë Heritage

1. Promoting Ecosan toilets
2. Making and distributing waste management tins (for plastic collection)
3. Linking with local officials
4. Welcoming volunteers/workshops...
5. Making and bottling the EM solution for cleaning FIN office and selling
6. Doing research (e.g. surveys)
7. Overseeing toilet construction
8. Testing innovations
9. Making compost
10. Public service projects (e.g. bus-stop painting)

Secondly, she pointed out that FIN Kameshwaram needs to decide whether it is a unit that would be an implementer or an experimenter.

Furthermore, Shyama noted the following:

- The FIN masons through autonomous, do not have a sense of FIN identity. They do not coordinate with Mr. Paranjothi and do not recognize him as leader. So we need a leader of the masons team, who can coordinate well with us. We need him to be a good speaker, a good spokesperson and computer literate.
- The other members of FIN do not generate their own revenue.
- We do not have a good communications leader who can communicate the progress of FIN to the Panchayat and Ward members and who can mobilize people for meetings or any functions.
- We need to develop a protocol with written documentation on the standardization of design and the standardization of process of all our activities in the village.
- We need to develop sales of EM better.
- We can also facilitate livelihood generation and combine it with routines for behavioural change – through starting tailoring and teaching classes.
- Our village staff also want to develop computer and English language skills.

Weaknesses of the FIN research team: Rigour of writing and speed of writing need to be improved a lot.

Communication skills both oral and email form need to be improved.

Follow-ups need to be pursued more consistently.

Recovery time after organization of events is much too long.

Failures: The failure was to be too lenient with laggards and free riders in projects and not fire them sooner. Lesser tolerance for non-performance and free riding would do all good.

Another failure is lack of timely documentation. Though notes for writing the annual report were diligently maintained this report is being written in mid-2017.

12. Concluding remarks on organizational evolution

At the start of 2016, the conceptual framework was as in Figure 1.



A variety of wonderful projects were successfully implemented, and furthermore as the annual report showed, FIN volunteers and some new recruits also worked on a few projects and actions outside of Kameshwaram, while applying the lessons, methodologies and approach developed from our work in Kameshwaram, as follows.

- For instance, in 2015, FIN Trust had received a grant from the NCSTC, Department of Science and Technology, Government of India to study the impact of sanitation on health in 30 villages covering three states – Tamil Nadu, Gujarat and Sikkim. The objective was to compare villages that had been recognized by the Government or the print media as being outstanding in terms of sanitation coverage with similar but

unrecognized villages in order to understand the drivers of performance and the obstacles that challenged non-performers.

- This research project was completed successfully and conferences were held in Gujarat and Tamil Nadu to diffuse the results with policy makers.
- Members of the FIN research team also helped (pro-bono or free of charge) to train surveyor teams for an EU funded project MNEmerge (Grant agreement no: 612889) to survey 2400 rural households in four states of India.
- To commemorate World Toilet Day, November 19, an international conference was organized in collaboration with the United Nations University, UNU-MERIT (Netherlands) in Delhi. Running over November 19th and 20th and entitled, “Pathways to SDG6: Macro to Micro Perspectives” it was a highly successful conference that attracted policy makers, practitioners and academics.
- Finally, work based on Kameshwaram got published in academic journals and digital media news magazines.

In sum, we realized that FIN India had now managed to attract young researchers, and its expertise could be applied to study WASH (water, waste management, sanitation and hygiene) issues beyond Kameshwaram. Thus, we decided that Friend In Need Trust would henceforth have two divisions: FIN India and FIN Kameshwaram. FIN India would work on WASH issues of all marginalized zones in India, both urban and rural; while FIN Kameshwaram would continue in Kameshwaram as a rural living lab experimenting with grass roots innovation generation and diffusion and livelihoods creation. We look forward to a fruitful and fun 2017!

13. Budget

| | 2016 FIN KAMESHWARAM ACCOUNTS AT A GLANCE | | | | | | | | | | | | |
|--|---|-----------------|--------------|--------------|------------|-------------|-------------|---------------|------------------|----------------|-----------------|-----------------|--------------------|
| | January | February | March | April | May | June | July | August | September | October | November | December | Grand Total |
| Livelihood generated for masons | 26200 | 28500 | 29400 | 27000 | 19600 | 32100 | 29900 | 35400 | 32100 | 26850 | 28000 | 26600 | 341650 |
| Payment for waste collection | 1210 | 0 | not collect | 200 | 620 | 500 | 560 | 460 | 450 | 380 | 420 | 400 | 5200 |
| Field Income made from selling waste | 40 | 102 | 65 | 0 | 0 | 40 | 80 | 0 | 140 | 60 | 0 | 70 | 597 |
| Other revenue | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Revenue generated | 27450 | 28602 | 29465 | 27200 | 20220 | 32640 | 30540 | 35860 | 32690 | 27290 | 28420 | 27070 | 347447 |
| Total Cost incurred | 38696 | 47818 | 45035 | 26509 | 46484 | 36823 | 44446 | 80576 | 41680 | 45932 | 126336 | 56856 | 369516 |
| | | | | | | | | | | | | | |
| Field Costs (besides salary) | January | February | March | April | May | June | July | August | September | October | November | December | Grand Total |
| Utilities=electricity, water, internet, rent | 3116 | 2594 | 4268 | 2945 | 3165 | 3603 | 3121 | 4361 | 3136 | 4127 | 5210 | 6325 | 45971 |
| Salaries paid in field | 0 | 3300 | 800 | 1600 | 4900 | 2000 | 5600 | 8400 | 9920 | 3920 | 11100 | 3250 | 54790 |
| Waste management expense | 1130 | 0 | 300 | 1000 | 8888 | 2255 | 0 | 312 | 1106 | 0 | 400 | 0 | 15391 |
| Toilet construction expenditure | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1500 | 0 | 0 | 1500 |
| Toilet incentive payment to families | 0 | 4000 | 4000 | 0 | 2000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10000 |
| Other partner payment made | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6000 | 0 | 6000 |
| Food and drinks | 75 | 715 | 202 | 205 | 440 | 1666 | 120 | 990 | 118 | 120 | 4724 | 1373 | 10748 |
| Stationery purchase | 1425 | 764 | 0 | 0 | 2851 | 84 | 175 | 1260 | 200 | 0 | 555 | 910 | 8224 |
| Transportation | 280 | 100 | 1600 | 400 | 980 | 900 | 8400 | 5450 | 200 | 1070 | 16870 | 10150 | 46400 |

| Field Costs (besides salary) | January | February | March | April | May | June | July | August | September | October | November | December | Grand Total |
|---|---------|----------|-------|-------|-------|-------|-------|--------|-----------|---------|----------|----------|-------------|
| Office space improvements | 0 | 0 | 0 | 424 | 0 | 0 | 0 | 400 | 0 | 0 | 0 | 0 | 824 |
| Office supplies | 1035 | 3015 | 1558 | 350 | 930 | 165 | 1100 | 1440 | 0 | 0 | 2800 | 1931 | 14324 |
| Office furniture | 0 | 1730 | 87 | 0 | 0 | 3500 | 80 | 1620 | 0 | 0 | 0 | 0 | 7017 |
| Office equipment | 2555 | 400 | 2960 | 330 | 2000 | 0 | 0 | 125 | 0 | 0 | 0 | 220 | 8590 |
| Other | 7340 | 600 | 0 | 0 | 0 | 400 | 100 | 27398 | 4500 | 10680 | 39600 | 8547 | 99165 |
| Auditing administration | 0 | 0 | 0 | 0 | 500 | 500 | 5050 | 10500 | 0 | 0 | 5465 | 0 | 22015 |
| Xerox | 840 | 0 | 535 | 10 | 285 | 250 | 0 | 860 | 0 | 0 | 1490 | 0 | 4270 |
| Courier | 200 | 0 | 200 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 400 |
| Outside Meetings | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4242 | 0 | 4242 |
| Social Marketing | 0 | 0 | 200 | 0 | 0 | 0 | 0 | 2460 | 0 | 0 | 0 | 0 | 2660 |
| Work shop costs | 0 | 5200 | 1785 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6985 |
| | | | | | | | | | | | | | 0 |
| Total Field expenses | 17996 | 22418 | 18495 | 7264 | 26939 | 15323 | 23746 | 65576 | 19180 | 21417 | 98456 | 32706 | 369516 |
| Total salary payments sent through bank | 20700 | 25400 | 26540 | 19245 | 19545 | 21500 | 20700 | 15000 | 22500 | 24515 | 27880 | 24150 | 267675 |
| Total expenses | 38696 | 47818 | 45035 | 26509 | 46484 | 36823 | 44446 | 80576 | 41680 | 45932 | 126336 | 56856 | 637191 |

Project Grant Title: “Incentivizing rural sanitation through sustainability audits”

Running from August 2015- December 2016

Catalyzed, supported and funded

By the National Council for Science & Technology Communication,

DST, New Delhi

Budget Details of Project

| Sl. No. | Sanctioned Heads | Aug 2015-March 2016 | April 2016-July 2016 | August 2016-Dec 2016 | Total spent | Total Obtained | |
|---------|---------------------------|---------------------|----------------------|----------------------|-------------------|----------------|---------|
| 1 | SALARIES | 546000 | 234000 | 252000 | 1032000 | 14-Aug-2015 | 1000000 |
| 2 | CONSUMABLES STATIONARY | 10,521 | 0 | 34560 | 45081 | 04-Nov-16 | 800000 |
| 3 | SUPPLIES AND MATERIALS | 30,000 | 20000 | 169049.75 | 219049.75 | Total Obtained | 1800000 |
| 4 | TRAVEL | 97,556 | 52,120 | 42,989 | 192665 | | |
| 5 | CONTINGENCIES | | | | 0 | | |
| 6 | OVERHEAD EXPENSES | 0 | 0 | 66,397 | 66397 | | |
| 7 | OTHERS (WORKSHOPS) | 0 | 0 | 455431 | 455431 | | |
| 8 | TOTAL | 684077 | 316120 | 1020426.75 | 2020623.75 | | |