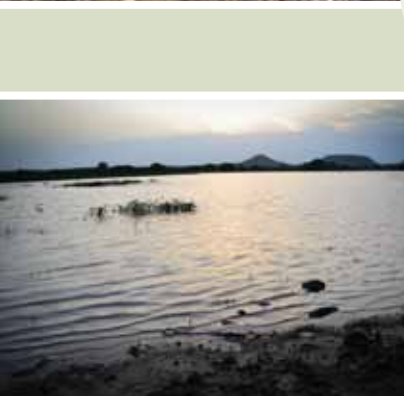




10 years
2005 • 2015

A glimpse into projects
supported by Arghyam





10 years

2005 • 2015

A glimpse into projects
supported by Arghyam

CEO's Message



Arghyam, meaning “offering” in Sanskrit, was set up in 2001 by Rohini Nilekani. Arghyam’s work in the Water and Sanitation (WATSAN) sector began in 2005 with the vision of “Safe, sustainable water and sanitation for all”. It has been an exciting 10 years growing from simple beginnings in a rainwater harvesting project in Bagalkot, Karnataka to supporting over 100 projects in 26 states and undertaking some challenging and interesting experiments ourselves in the urban WATSAN and rural sanitation spaces.

Through this journey Arghyam has been fortunate to work with highly experienced partners who have brought in a rich set of lessons that have constantly helped us shape how we think about water and sanitation in rural and urban India. In 2011 we moved into defining clear verticals of work: Rural Groundwater, Rural Sanitation and Urban. In particular, based on several years of work and expert advice, we began to focus on applying the principles of Participatory Groundwater Management to help planning and sustaining water security for communities in the long term. We also began investing in collectives – both among our own partners and among sector experts to create networks that bring

in experts from various fields to solve complex problems for e.g. geogenic contamination by Arsenic and Fluoride. In parallel, since we learnt that most sanitation problems have their beginning and end in behaviour change, we tested how ‘behaviour nudges’ enable and change toilet use. Our urban programme has also grown from a boutique approach to helping create specific solutions for water management – again using principles of Participatory Groundwater Management and better sanitation through Faecal Sludge Management. India Water Portal, which was started in 2005 with encouragement from the National Knowledge Commission, continues to thrive as an online repository of knowledge on WATSAN.

The work has constantly helped us realise the importance of working in WATSAN not only for the direct benefits of better water and sanitation security but for its far reaching effects such as on health, gender empowerment, livelihoods and even literacy (through improved attendance rates).

This publication is an attempt to capture the work of our most significant projects and partners over the last ten years across the country.

10 years - 2005–2015: A glimpse into projects supported by Arghyam

First published by Arghyam (India), 2015

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Photographs

Arghyam staff and its partners

Design + Typesetting

Salil Divakar Sakhalkar, Sixth Sense Corporate Communications

For further information on the contents of this document
and a list of our publications, please contact:

Arghyam

599, HAL 2nd Stage, Indiranagar
Bengaluru – 560008, Karnataka, India

Tel: + 91 80 41698942

Fax: + 91 80 41698943

Email: info@arghyam.org

Website: www.arghyam.org

Rural Water & Sanitation

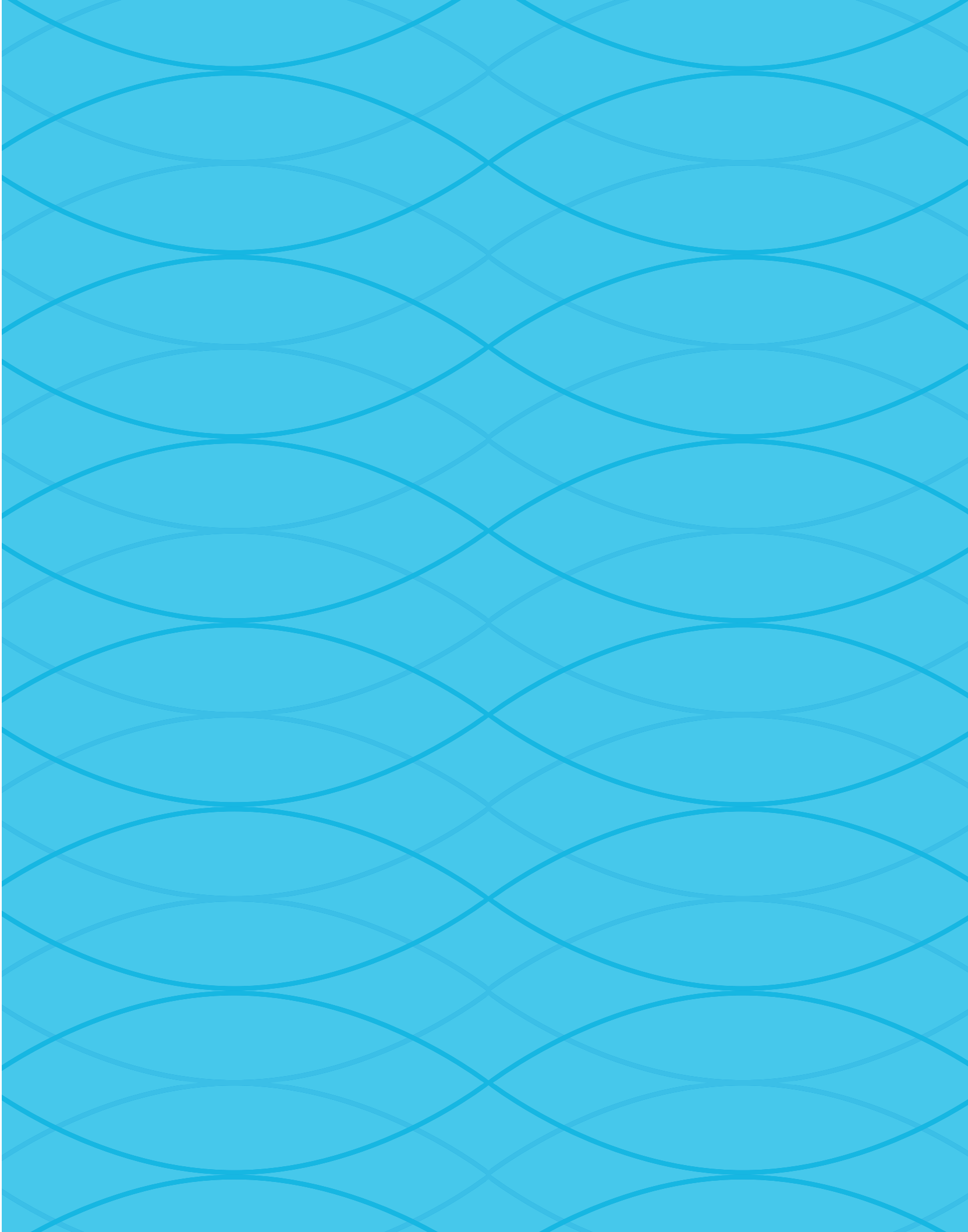
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ANDHRA
PRADESH



02
03

01

Project name

Studying the feasibility of setting up self sustaining Activated Alumina Filter service model for mitigating Fluoride contamination in drinking water (Phase II)

Partners

OUTREACH

Small Scale Sustainable Infrastructure Development Fund (S³IDF)

Partners Profiles

OUTREACH is an NGO which works in diverse development contexts, targeting heterogeneous communities, focusing on rural poor in Karnataka, Andhra Pradesh and Tamil Nadu. Its long term objectives include natural resource

management, livelihood enhancement, water supply and sanitation, water quality and building resilience to climate change, etc. to develop self-reliance to improve the quality of life of vulnerable rural communities.

<http://outreachindia.org/>

S³IDF aims to reduce poverty in developing countries by supporting small-scale enterprises that meet basic infrastructure needs and provide opportunities for economic advancement. It envisions a world where the poor benefit from inclusive financial, commercial, and social systems, gaining opportunities to overcome poverty.

<http://s3idf.org/>



Duration

March 2012 – September 2012 (6 months)

Budget (INR)

8 Lakhs

Project location

4 Gram Panchayats in Chittoor district of Andhra Pradesh

Reach

This project directly benefitted more than 8,500 people

Project summary

Contamination by Fluoride has affected over 6.6 crore people in India. In the previous phase, OUTREACH demonstrated the potential of Activated Alumina Filters to treat Fluoride. However, in the absence of a good delivery network in rural areas, there were several issues with replacing the filter medium and providing allied services. S³IDF provided expertise to create a model service delivery approach. This was then tested in Fluoride affected areas in Chittoor district.

Outputs

1. Water quality tests carried out to determine Fluoride concentration in the water sources of the intervention sites.
2. House to house surveys based on current market based drinking water solutions conducted, to analyze acceptance of various solutions and financial capabilities.
3. Studies conducted to determine how the filter's life cycle cost can be made lesser than bottled water available in urban areas.
4. Two pilots were developed to create necessary process learning to create

the blueprint of a sustainable filter business.

5. Domestic defluoridation filters based enterprise created. This also provided after sales services to sustain the usage effectively.



04
05

02

Project name

Neeru Aarogyam (Phase II)

Partner

Visakha Jilla Nava Nirmana Samiti
(VJNNS)

Partner Profile

VJNNS is an organization working in the tribal regions of Eastern Ghats in Visakhapatnam District of Andhra Pradesh. They have developed a unique perennial springs based Gravity fed water supply system.

<http://www.vjnns.org/>



Duration

January 2012 – December 2013 (24 months)

Budget (INR)

50 Lakhs

Project location

10 villages in Vishakapatnam district of Andhra Pradesh

Reach

This project directly benefitted more than 20,000 people

Project summary

In the Eastern Ghats, tribal habitations rely on natural springs and hill streams for their drinking water and other domestic needs. However, these sources had high fecal coliform contamination resulting in health impacts. Improper hygiene and sanitation practices compounded this problem. In order to tackle this, Arghyam partnered with VJNNS for implementing the second phase of Neeru Aarogyam project. The focus was on creating water supply systems with filtration units to improve water quality. Three other donors came forward to support 16 Gravity Flow Water Supply Systems (GFWSS) in other villages. The community led the process

of springs identification, planning, implementing and maintaining the water supply with technical assistance from VJNNS.

At the end of the project potable water was available 24x7 in the villages.

Outputs

1. Trained barefoot hydrogeologists for water security.
2. More than 50 gravity flow systems were installed that benefitted over 4,500 households.
3. Educated tribal communities on water and sanitation issues and build their capacities in managing the GFWSS.
4. Revived old systems using a bridge fund.
5. Village level institutions established for operation and maintenance of systems.



06
07

03

Project name

Promoting Participatory Groundwater Management (PGWM) principles and practices in Natural Resource Management projects.

Partner

Watershed Support Services and Activities Network (WASSAN)

Partner Profile

WASSAN is a network that works towards bringing about a qualitative change in watershed based development programmes in India. It aims to provide capacity building and support services for development initiatives in Natural Resources Management with a focus on



Duration

January 2011 – March 2014 (39 months)

Budget (INR)

70.64 Lakh

Project location

Mehbubnagar, Rangareddy and Anantpur districts of Telangana and Andhra Pradesh

Reach

This project helped train more than 2,000 people as para workers on hydrogeology. The project benefitted people living in the 3 districts where the project was implemented

promoting livelihoods of poor, economic and gender equity.

www.wassan.org

Project summary

Anantapur district is economically backward and chronically drought affected. Lack of groundwater management has led to severe water crisis in the region. In this project WASSAN acted as a resource centre in PGWM in collaboration with other NGOs, government departments, and academic institutions.

As a result of the interventions, communities came together to share

their borewells – a concept called borewell pooling. PGWM principles were demonstrated in achieving water security and helping farmers plan appropriate crops. The PGWM approach was also adopted and demonstrated through both the government's Integrated Watershed Management Programme (IWMP) and the Indira Jala Prabha schemes.

Outputs

1. Trained 15 para workers in Pargi and Anantpur.
2. 25 technical assistants participated in a 6 day training programme on groundwater collectivization.
3. Conducted 59 trainings to develop a cadre of 2,168 para workers. People from the areas where PGWM programme is implemented also trained.
4. Established Climate Information Centres in 12 micro- watersheds to develop well inventory and prepare reduced water level maps.
5. Conducted geological study in Kuderu, Sirivaram, Tellarallagutta and Kummarivandlapally.



08

09



6. Water harvesting structures planned based on understanding of hydrogeology and recharge and discharge area delineation in 12 micro watershed projects. More than 30 such structures were constructed based on these plans.
7. Piloted methodology of developing water security plans in Naskal, Shivareddypally and Palepally micro watersheds in Doma and Pargi mandals of Rangareddy district.
8. Integrated PGWM principles in the Detailed Project Reports (DPRs) under the IWMP. 22 micro-watershed plans based on PGWM submitted as IWMP plans.
9. Worked with IWMP to set up Participatory Hydrogeological Monitoring (PHM) units in 12 micro-watersheds.
10. Groundwater sharing through pooling of borewells practised in 12 villages.
11. Department of Rural Development has adopted the establishment of PHM system in state wide watershed programs (IWMP) in Andhra Pradesh.
12. The State Level Nodal Agency (SLNA) have integrated the PGWM based planning processes in 100 IWMP programs in Andhra Pradesh.
13. More than 2.5 crores of government money was leveraged from various schemes such as IWMP and Indira Jala Prabha to implement PGWM based water security planning.



03



10

11

Project name

Neeru-Aarogyam (Phase I)

Partner

Visakha Jilla Nava Nirmana Samithi (VJNNS)

Partner profile

VJNNS is an organization working in the tribal regions of Eastern Ghats in Visakhapatnam District of Andhra Pradesh. They have developed a unique perennial springs based gravity fed water supply system.

<http://www.vjnns.org/>

Project summary

In 2009, VJNNS identified villages with poor or no access to basic infrastructure facilities like electricity to work in. The government's water supply systems failed to work in these villages because of improper site selection, poor groundwater quality (rich in iron content), poor quality of construction and equipment used. The villagers travelled to remotely located springs to fetch water for domestic use. Even this was not a solution because of poor water quality. VJNNS partnered with the community to establish Gravity Flow Water Supply System (GFWSS) in these villages to provide sustainable, safe water supply.



04



Duration

October 2009 – September 2011
(24 months)

Budget (INR)

36 Lakhs

Project location

7 villages in Visakhapatnam district
of Andhra Pradesh

Reach

This project has directly benefitted
more than 2,500 people

Wastewater management and sanitation models were introduced and robust mechanisms for community participation were evolved to ensure operation and maintenance of the systems. Water quality data and information on water related issues, specific to Eastern Ghats was disseminated through the India Water Portal.

Through this effort, the villages were able to access 24x7, safe water supply.

Outputs

1. Water quality testing and baseline studies were conducted.
2. Awareness building workshops and trainings for the community were conducted on aspects of setting up and maintaining water supply systems, water quality, hygiene management etc.
3. Over Rs. 2 lakhs leveraged from beneficiary contribution for labour expenses towards construction of the GFWSS.
4. Around 5 mini-water supply projects constructed and 10 mini water supply projects revived.
5. These systems are properly designed with filter units and provide 24x7 water supply.
6. Four schools provided water connections.
7. Village level institutions established for operation and maintenance of systems.
8. One bathroom cum toilet constructed as a model which led to adoption of household sanitation including toilets by at least 10% households.
9. Three community toilets were constructed.
10. Two nursery schools were provided with sanitation units.



12

13

05

Project name

Ensuring fluoride-free water by adopting a variety of decentralized approaches (Phase I)

Partner

OUTREACH

Partner Profile

OUTREACH is a NGO which works in diverse development contexts, targeting heterogeneous communities, focusing on rural poor in Karnataka, Andhra Pradesh and Tamil Nadu. Its long term objectives include natural resource management, livelihood enhancement, water supply & sanitation, water quality and building resilience to climate change,



Duration

August 2009 – July 2011 (24 months)

Budget (INR)

10 Lakhs

Project location

One village in Chittoor district of Andhra Pradesh

Reach

This project directly benefitted more than 300 people

etc. to develop self-reliance to improve the quality of life of vulnerable rural communities.

<http://outreachindia.org/>

Project summary

The project improved water quality by tackling the fluoride problem in a village in Andhra Pradesh. Existing concerns within the government systems of Chittoor district about fluoride contamination were validated through water quality studies. Several decentralized fluoride mitigation measures were tested during the pilot phase. This helped in the identification of several cost-effective solutions for improving water quality and led to efforts to introduce these measures in the district.

Outputs

1. Awareness building workshops and trainings conducted for the community and local government to explain the ill effects of high fluoride concentration in drinking water.
2. Villagers trained to use field test kits, thus empowering them to independently test the quality of water.
3. A field-test based report was submitted to the district administration. Based on this the Collector ordered testing of water samples for fluoride in about 60 villages. This confirmed that the water was found to contain fluoride above permissible levels.
4. MGNREGS leveraged for afforestation efforts to achieve better vegetation and less soil erosion.
5. Various methods to provide potable, fluoride free water tried:
 - Rooftop rainwater harvesting systems set up to provide safe water to around 15 households.
 - Activated alumina filters installed to provide safe water to around 30 households.
 - Jal Nirmal Defluorider was tested for effectiveness and suitability on a pilot basis in 5 households.
 - Village tank (*Cheruvu*) renovated to ensure better surface water storage.



14

15



06

Project name

Taking up tank rehabilitation, introduction of rooftop rain water harvesting, water treatment and eco-sanitation

Partner

Development of Humane Action (DHAN) Vayalagam (Tank) Foundation

Partner Profile

DHAN Vayalagam (Tank) Foundation is a professional, grassroots, action-oriented, development organization. It has a sub-sectoral focus on water with the belief that the local management of the tank system can be the only solution to the problem over a long period. DHAN Foundation, started in 1997, has identified 'water' as a unique tool for alleviating poverty, and has established a

separate people's institution, the 'DHAN Vayalagam (Tank) Foundation' for scaling up water related initiatives.

<http://www.dhan.org/tanks/index.php>

Project summary

Chittoor, an arid district in Andhra Pradesh, faces seasonal drought. This causes acute water scarcity, leading to very low drinking water availability. DHAN Vayalagam Foundation has focused on developing and renovating traditional water harvesting structures as an effective way to collect rainwater and recharge groundwater. This was done through:

- ▶ **Building Social capital:** To establish sustainable local management by building different user groups called



Duration

March 2008 – April 2010 (26 months)

Budget (INR)

27.5 Lakhs

Project Location

6 villages in the Chittoor district of Andhra Pradesh

Reach

This project directly benefitted around 490 people and indirectly benefitted over 1,000 people

Vayalagams and networking them towards water conservation.

- ▶ **Conservation and development of tanks in cascade:** Renovation of traditional tanks in a cascade approach to enhance the availability of water for agriculture, livestock, domestic and other uses.
- ▶ **Agricultural development:** Introduction of effective water management practices, improved crop yields; and establishing marketing linkages.
- ▶ **Improving drinking water:** Promotion of rainwater harvesting, biosand filters (to improve water quality).
- ▶ **Hygiene promotion:** Demonstration of Eco-San units and hygiene practices like hand washing with soap etc.

Outputs

1. 6 village tanks renovated and rehabilitated. This included:
 - De-siltation of feeder channel to improve the inflow of water into the tanks.
 - De-siltation of tank beds which created additional water storage capacity of about 13,066 Cu Mts (13.07 Million Lts).
 - Tank silt application to crop fields contributed towards enhancing the soil fertility and in reducing the use of chemical fertilizers.
2. Improved water holding capacity of the tanks enabled fish rearing.
3. Tank rehabilitation significantly contributed to groundwater recharge.
4. Rooftop rainwater harvesting made a viable option for household water security, with 6 households adopting this technology.
5. Over 15 Bio-sand filters introduced to provide safe water.
6. Over 12 Eco-San toilets were constructed as demonstration units.
7. Through various development schemes of the government, approximately Rs. 65 Lakhs was leveraged.



ASSAM



18

19

01

Project name

Strengthening indigenous people's response to multiple-use water services in villages near floodplain wetlands in Morigaon District, Assam

Partner

Resource Centre for Sustainable Development (RCSD)

Partner Profile

RCSD undertakes scientific, participatory research and extension for promotion of sustainable development addressing issues relating to energy, water, environment degradation, biodiversity and climate change.

<http://www.rcsdin.org/>



Duration

February 2010 – January 2012 (24 months)

Budget (INR)

20 Lakhs

Project location

4 villages in the Morigaon district of Assam

Reach

This project directly benefitted more than 520 people

Project summary

The people in the project area rely entirely on the wetlands for water and livelihoods. Changing rainfall patterns and uncertainty of river run offs have led to a decline in water availability for agricultural purposes. The construction of railroads across the wetland altered the traditional water flow patterns. The villages relied entirely on hand pumps for water security.

However, many of these hand pumps were severely contaminated making the water unusable. This project aimed to strengthen the water and nutritional

security of the people by focusing on multiple-use water services (MUS) and water use efficiency (WUE) at the household, homestead and in the field. The project improved land and water productivity management in flood plain. Guidelines were developed for wise use of wetlands, incorporating the lessons from the local adaptive management and larger international and national management frameworks. Nutritional security of landless people was enhanced by providing them with land, home gardens and duckeries.

Outputs

1. Baseline studies including hydrogeological mapping of the area was carried out in order to design appropriate interventions.
2. Document with guidelines on local best practices on wetland management published.
3. Water quality testing of the hand pumps carried out. Pumps with excess contamination of iron were marked red so that people did not use them.
4. Bio sand filters were installed in the project villages to ensure provision of bacteria-free water.
5. Ponds were constructed as groundwater recharge structures.



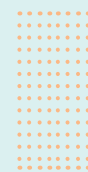
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Fisheries and duckeries were introduced in them to ensure that the ponds continue to get maintained post project period, while also providing livelihood and nutritional security. These ponds were maintained by women's groups, providing them livelihood and nutritional security to their families.

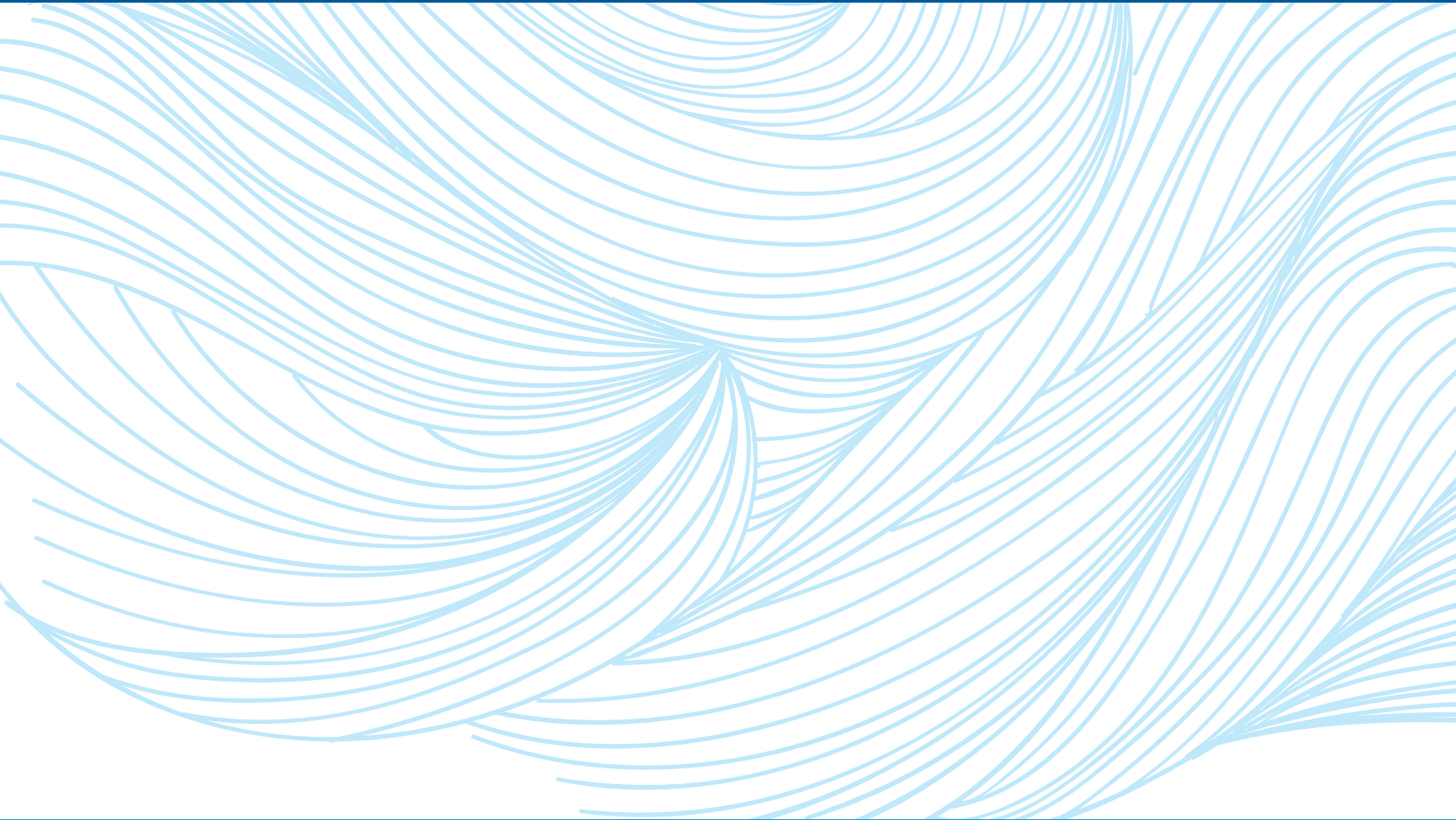
6. Awareness campaigns were conducted on WASH, leaflets, posters were generated as IEC material.



01



BIHAR



24
25

01

Project name

Sankhiya

Partner

Inner Voice Foundation (IVF)

Partner Profile

IVF is a global civil society coalition campaigning to end the water and sanitation crisis. It works extensively on water quality issues, especially in Arsenic-affected regions to ensure that communities gain access to safe drinking water.

www.innervoicefoundation.in



Bihar + Uttar Pradesh

Duration

November 2011 – October 2013

Budget (INR)

39.87 Lakhs

Project location

10 villages in Bhojpur and Ballia districts of Bihar and Uttar Pradesh

Reach

This project indirectly benefitted more than 58,000 people

Project summary

Groundwater in several areas of Bihar and Uttar Pradesh is contaminated by Arsenic. Since it is the primary source of drinking water, this leads to severe cases of Arsenic poisoning. This project helped improve water supply and facilitated community empowerment by awareness generation and capacity building.

Contaminated water sources were monitored regularly using field testing kits. The project also opened up dialogue with government agencies on the issue of Arsenic contamination.

Outputs

1. A baseline survey conducted in the project villages to understand the extent of Arsenic contamination and its effects on the health and livelihoods.
2. More than 40 dugwells revived in 4 villages for providing Arsenic-free water.
3. A series of meetings with community, GP representatives, schools, doctors, conducted to inform them about arsenic issues.
4. Health camps conducted in several villages in collaboration with Health Department.
5. Several advocacy meetings held with State Water and Sanitation Mission

- and senior Government officials for providing Arsenic-free water to people and for reviving dug wells.
6. Awareness generation posters, pamphlets, handbills, and wall paintings on the harmful effects of Arsenic and its mitigation methods prepared and disseminated.
7. Testing of water samples using field-testing kits done in all the 10 villages, data tabulated and shared with Government officials.
8. Inner Voice Foundation staff were trained at Jadhavpur University on Arsenic contamination issues.



26
27

02

Project name

Propagating rain water harvesting in North Bihar

Partner

Megh Pyne Abhiyan (MPA)

Partner profile

Megh Pyne Abhiyan, meaning Cloud Water Campaign, is a campaign cum functional network initiated in December 2005, based on the belief that every individual has a right to a life with dignity, determination and dominance. It aims to effectively revive, innovate and institutionalize water and sanitation management practices. It also seeks to mainstream issues concerning floods

through collective accountability and action.

<http://meghpyneabhiyan.wordpress.com/>

Project summary

Every year fierce floods affect the lives and livelihoods of people in North Bihar due to heavy rainfall and breaching of embankments. During the floods, there is a lack of safe drinking water, sanitation and shelter that increases the vulnerability of people to the outbreak of diseases.

From 2006, over 2 phases of the project, Arghyam supported MPA to propagate WatSan interventions in the flood prone villages, increase self-reliance of the community and enhance local coping



Duration

Phase I: February 2007 – May 2008
(16 months)

Phase II: February 2009 – March 2011
(26 months)

Budget (INR)

2 Crores

Project Location

100 villages in Khagaria, Saharsha, Supaul, Madhubani and Bettiah districts of Bihar

No. of Beneficiaries

This project indirectly benefitted over 1.78 lakh people

mechanisms to reduce the community's vulnerability to flooding. Some of these measures were taken to scale in the Khagaria district by the government. The government now recognises MPA as its grassroots partner for helping provide scalable, sustainable and low-cost solutions for watsan under flood situations.

Outputs

Over two phases the project :

1. Three rounds of water quality testing, of around 50 drinking water sources done per Panchayat.
2. Communities in all 22 Gram Panchayats started using the low cost, alternative safe drinking water solutions during floods. Some of these included:
 - Locally made, household based iron & bacteria removal matka filters - more than 500 matka filters installed.
 - Jal Kothis (water storage containers) designed for safe storage of water.
 - Over 330 community rainwater harvesting structures constructed.
3. As leach pit toilets get flooded during the floods Eco-San toilets promoted for safe sanitation. Over 60 Eco-San toilets, locally called Phaydemand Shouchalays constructed.
4. 36 farmers successfully tried Systematic Rice Intensification (SRI / Shri Vidhi) for growing summer paddy.



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03

Project name

Rainwater harvesting and water body restoration in Bodhgaya Block, Gaya District, Bihar

Partner

Disha

Partner profile

Disha is a voluntary organization inspired by Mahatma Gandhi's ideology of serving the downtrodden, poorest of the poor and marginalized sections of the urban and rural community by working on peace, justice, human

rights, education, health, employment, women's empowerment and advocacy. Disha works with civil societies to find lasting solutions to poverty, justice and entitlements at the individual and community level.

Project summary

Depleting groundwater levels in Gaya district was putting high stress on the agriculture-dependent communities of the region. Through the use of rainwater harvesting technologies, over the two phases of the project,



Duration

Phase I: March 2006 – January 2007
(11 months)

Phase II: March 2007 – February 2008
(12 months)

Budget (INR)

52 Lakhs

Project location

15 villages in Gaya district of Bihar

Reach

This project has directly benefitted more than 2,500 people and indirectly benefitted over 37,000 people

Arghyam supported Disha in reducing the vulnerability of these communities to droughts. The burden on women who previously travelled long distances to fetch water was reduced significantly by providing them easy access to water. Schools also became self-sufficient with access to harvested rainwater. Workshops conducted for members of the Gram Panchayat resulted in an increased awareness about rainwater and the role the community and local government play in its conservation.

Outputs

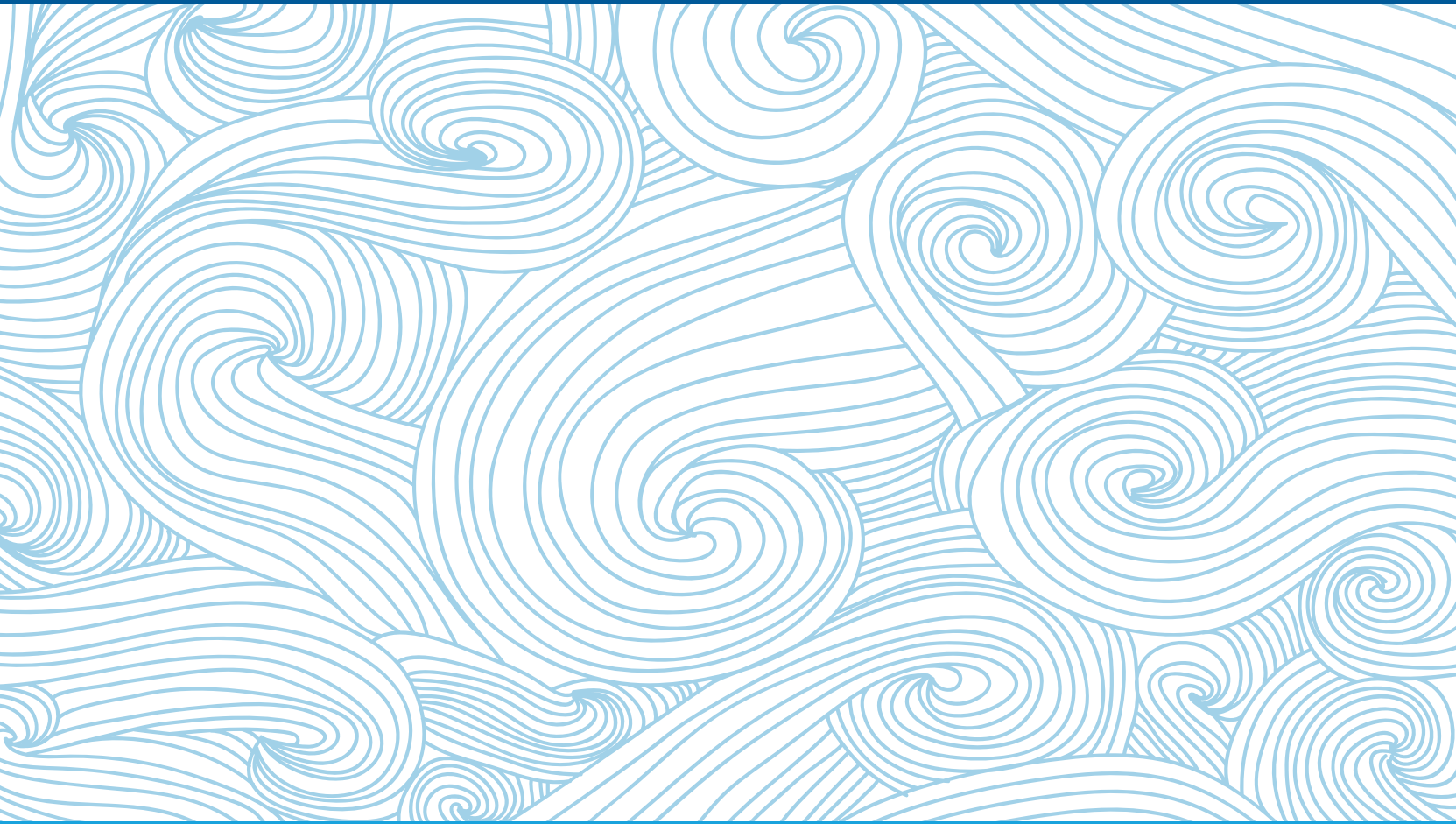
Over the two phases of the project:

1. Forty empowered Gram Panchayat members understood the importance of rainwater and their role in water conservation through a workshop organized by Disha.
2. Rainwater harvesting was undertaken in project villages:
 - 250 households spread across 5 villages became water secure.
 - 8 rainwater harvesting structures with underground tanks of 50,000

- litres capacity were constructed and managed by School committee.
3. Twelve traditional rainwater harvesting structures were repaired and revived sufficiency.



CHHATISGARH



32
33

01

Project name

Action research on implementation of Panchayat Extension to Scheduled Areas Act (PESA), 1996 in Chhattisgarh (with special focus on water)

Partner

Society for Participatory Research in Asia (PRIA)

Partner Profile

PRIA is an international centre for learning and promotion of participation and democratic governance which has embarked on a set of key initiatives focusing on participatory research, citizen-centric development, capacity building, knowledge building and policy advocacy.

www.pria.org

Duration

December 2011 – March 2014 (27 months)

Budget (INR)

38 Lakhs

Project location

40 Panchayats in Sarguja, Korba, Kaker and Rajnandgaon districts of Chhattisgarh

Reach

This project directly benefitted more than 53,000 people

Project summary

Rural areas in Chhatisgarh are rich in natural resources. Yet, lack of effective governance restricted access of the tribal communities to basic resources. Traditional and community based systems did exist, but over the years they had begun to break down. PRIA, sought to evolve systems that support efficient governance mechanisms as provided by the PESA Act, 1996. The project highlighted the functioning of local governance structures with respect to water management. This helped develop an understanding of how current systems converged with natural resource laws.

Outputs

1. Citizen survey was conducted.
2. Construction of *dabris*, wells, ponds and check dams in the intervention sites.
3. Around 80 community meetings were held, where tribal men and women voiced their opinions, and signed resolution letters to work on water management issues.
4. Concrete commitments were made to:
 - Raise the stalled tap water scheme issue in Korba
 - Construct a check dam in Umardaha, participation of Path Pradarshak in Surguja
 - Donation of land for construction of *dhondi* in Irganwa
5. Conduct Gram Sabha meetings in Saraiplali.
6. Nearly 70% of the population was sensitized to the issues of PESA, Gram Sabha participation and community participation in water management issues.
7. A 5 year vision document was prepared for 5 Panchayats in Korba district to articulate the felt needs and aspirations of the people.
8. A State level consultation was organised in which state government officials, NGOs and elected representatives came together to discuss the status of implementation of PESA Act, 1996 and water issues in Chhattisgarh.



GUJARAT



36

37

01

Project name

Exploring Demand Driven Drinking Water Governance in Kachchh district, Gujarat (Phase II)

Partner

Sahjeevan

Partner Profile

Sahjeevan is a knowledge resource organization that creates viable models, demonstrates these models through communities and encourages state and other stakeholders to adopt these for scaling. The organization also provides regional planning, training and coordination support for large scale implementation.

www.sahjeevan.org

**Duration**

April 2011 – December 2012 (21 months)

Budget (INR)

45 lakhs

Project location

30 Panchayats in Kachchh district of Gujarat

Reach

This project has indirectly benefitted over 50,000 people

Project summary

In this phase, Sahjeevan focused on consolidating its work on the *Pani Thiye Panjo* (PTP) programme. It advocated the creation of a Taluka Panchayat Pani Samiti to manage the decentralized water systems and strengthen local water governance. It also promoted principles of aquifer based groundwater management.

Outputs

1. A strategy paper on advocating water pricing for local drinking water resources was published.
2. Documents on water governance, Taluka Pani Samiti and groundwater protection guidelines were published.
3. Baseline information from 15 Panchayats was collected in order to study the effectiveness of water governance.
4. The water governance system which involves water asset registration, water budgeting, collection of water taxes etc. was consolidated involving Gram Panchayats.
5. Support was provided to Pani Samitis and Gram Panchayats to prepare their drinking water plan and to get financial allocation from government schemes.
6. Training modules on Taluka Pani Samiti were published.
7. Advocacy was done with the state government on the importance of setting up a Taluka Panchayat Pani Samiti.



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39



02

Project name

Demonstrating Participatory Groundwater Management (PGWM) in Gujarat – Towards a scientific policy framework.

Partner

Arid Communities and Technologies (ACT)

Partner Profile

ACT, a non-profit organization working in Kachchh region of Gujarat, aims to strengthen the livelihoods of communities in arid and semi-arid regions by providing access to technologies and by engendering technological and institutional solutions.

www.act-india.org

Project summary

Climatically most of Gujarat can be characterised as arid or semi-arid and faces frequent droughts. To mitigate these drought conditions, Gujarat has adopted many strategies for water security, of which groundwater exploration and exploitation are the most significant. In this project, ACT acted as a resource centre in Participatory Groundwater Management (PGWM) in collaboration with other NGOs, government departments, and academic institutions. It demonstrated how a village, community, or group of stakeholders relying on an aquifer can reduce water stress and conflicts by adopting PGWM methods. Through various interventions,



Duration

January 2011 – March 2014 (39 months)

Budget (INR)

70 Lakh

Project location

7 villages in the Kachchh district of Gujarat

Reach

This project benefitted about 2,098 direct beneficiaries

these stakeholders understood and demonstrated an equitable and sustainable sharing mechanism based on the area's hydrogeology. This project also incorporated aquifer management into mainstream watershed and drinking water projects.

Outputs

1. 23 trainings under the barefoot geo-hydrologist (para worker) approach for 2098 people.
2. Work on three aquifer systems in the Kachchh district
3. Draft institutional structure generated for Kankavati (Shared) Aquifer Management
4. Incorporated drinking water source protection agenda in Kamaghuna and Vatachhad
5. Established Participatory Groundwater Monitoring Networks
6. Improved recharge to aquifers through

geological mapping leading to drinking water security

7. Community shares groundwater as a common pool resource by evolving management protocols
8. Work began in Rampar block pilot for livelihood water distribution and reservation.
9. Advocacy for incorporation of aquifer mapping and management guideline in Integrated Watershed Management Program of government and drinking water source protection guideline



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03

Project name

Developing Community Based Assets for Restoring Ground Water' and develop a cadre base for creating awareness on water governance, sanitation/hygiene management, basic entitlements and developing water security plans for the poor and marginalised community in the Rapar block (little Rann) of Kachchh (Phase III).

Partners

Samerth Charitable Trust

Partner Profile

Samerth is a non-profit development organization that works towards accelerating a humane, sustainable and equitable society. The focus is on

improving the conditions of marginalized communities.

www.samerth.org

Project summary

In the previous phase Samerth successfully helped communities in remote hamlets of Rapar Block of Kuchchh district access MGNREGS to ensure water security for themselves. In this Phase principles of hydrogeology were incorporated into their work. A cadre of Jal Doots -WatSan messengers were trained on government schemes and hydrogeology. People were also given easier access to information on government schemes by setting up information centres. The work has attracted the attention of the MLA of Rapar



Duration

September 2012 – March 2015
(31 months)

Budget (INR)

51.44 lakhs

Project location

20 Gram Panchayats in Kachchh district of Gujarat

Reach

This project has directly benefitted around 52,000 people

block and Officials at the Block level and explorations are underway to expand this work to all 97 GPs of the block.

Outputs

1. Five people from Samerth's staff and 7 village volunteers were trained to become parahydrogeologists by Arid Communities and Technologies (ACT).
2. 51 people from the 20 Gram Panchayats became *Jaldoots* - resource persons for the community who will be able to carry forward Samerth's work of providing water security by leveraging government schemes.
3. 14 Information Centres set up to help people with an easy understanding of government schemes available for them and the procedures for accessing them. *Jaldoots* run these Centres. More than 2,500 people had smoother access to entitlements such

- as housing, pension, job cards, ration cards, bank account numbers, etc. by going through the Information Centres.
4. To make the Information Centres self-sustaining Samerth accessed funds from other donors and helped some of the *Jaldoots* on a pilot basis to access credit to tie up a small business and become self-reliant while providing advice on government schemes and water.
5. People in the 65 hamlets of the 20 GPs conducted numerous mini Gram Sabhas to help plan their agenda for the Gram Sabha. Issues beyond water were discussed and hamlets got roads sanctioned for around Rs. 44 Lakhs and afforestation work done for about Rs. 11 Lakhs.



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6. 261 participants -*Pani Samiti* members, PRI members, Jaldoots were trained during the course of the project.
7. A Gujarati training manual was published on MGNREGS leverage for ensuring water security in dry areas, and providing employment. The manual was designed and produced in Gujarati and was inaugurated in the presence of the Rapar MLA. At the inauguration a training on MGNREGS was and 204 participants including MLA, TDO, Dy TDO, 8 Talathis, members of *PaniSamiti*, *Jaldoots* attended. As a result of this training MGNREGS was started in 8 Panchayats within 15 days.
8. The Jal-Doots prepared water security plans for 10 new GPs, of these 7 also had hydrogeological information.

- Hydrogeological information was also collected for 40 GPs outside the project area for future work. Water quality was routinely analysed and strategies developed when required to tackle contamination.
9. Eighty five Earthen Check Dams and 70 dug wells were constructed. The water storage potential for the Gram Panchayats went from 38.8mcft before intervention to 60 mcft. This can sustain the villages through the year if it rains around 300 mm every year. Around Rs. 3.63 crores was leveraged for this work both from government schemes and individual donors. Of this about 77% went back to the people as wages creating employment for more than 4500 people.

10. Five Gram Panchayats developed protocols for use and security of drinking water resources.
11. The project reached out to 58 schools, adolescent girls and 40 Anganwadi workers for hygiene and menstrual hygiene management and creating awareness of sanitation. While 724 applications for sanitation were submitted, only 26 units have been sanctioned.
12. Significant time was spent understanding government plans and resource allocations for water. The project won the appreciation of the government Officials and a next phase is being designed to work with the government to ensure water security in all 97 Gram Panchayats of Rapar block.



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04

Project name

Core Support and Strengthening of Utthan's People's Learning Centre for Water and Sanitation (Phase II)

Partners

Utthan

Partner Profile

Utthan is an organisation working on gender, livelihoods and decentralized governance issues in rural Gujarat. The focus of Utthan's interventions are on gender empowerment, livelihood security and conflict transformation within the wider framework of promoting gender equality and equity, human rights and improving the quality of life for those on the margins of society.



Duration

November, 2010 – January 2015
(51 months)

Budget (INR)

1.53 Crores

Project location

238 villages in Bhavnagar, Ahmedabad and Panchmahal districts of Gujarat

Reach

This project directly benefitted around 3,00,000 people

Hence Utthan focuses on Dalits, religious minorities, Adivasis and the poor.

www.utthangujarat.org

Project summary

In Phase I of its work supported by Arghyam Utthan engaged in collaborative capacity building at state, district and panchayat levels to access water resources, facilitated linkages between banks and women federations for safe sanitation, and demonstrated model villages. The idea of promoting a standalone centre for WatSan and resource groups that are comprised of trained people from villages guided by the Centre and by district level resource persons worked well in the pilot. This phase built and envisaged for the

People's Learning Centre for WatSan, established by Utthan to scale the Resource Group model created in the previous Phase and to help the Centre become financially self sustainable.

Outputs

1. The Area Resource Groups (ARG) and District Resource Groups (DRG) model was taken forward in the project areas. 6 ARGs were created and guided by the PLC WatSan team through trainings on water and sanitation.
2. The ARGs helped communities in the villages access schemes for water and sanitation such as Swajaldhara and Nirmal Bharat Abhiyan (NBA).
3. The communities were able to access new schemes worth about Rs. 9.1 Crores and put in about Rs. 91 Lakhs to improve water supply.
4. Awareness was raised on better hygiene and sanitation through

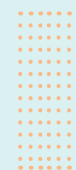


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- trainings to community. Specific regional workshops on the advantages of Eco-San toilets and 10 trainings on how to construct them were conducted for masons.
5. Sixty five Eco-San toilets built from project contributions as demonstration.
 6. Over 3,500 families were motivated to construct household toilets leveraging over Rs. 1.1 Crores from the NBA. The families themselves contributed about Rs. 2.2 Crores. A small loan was also leveraged from Shakti Microfinance to help construct about 90 toilets. Special focus was on making toilets friendly for people with disabilities.
 7. Other sanitation interventions were also undertaken as part of the project. About 750 soak pits and 23 drainage systems were constructed as a part of this project.
 8. A school was assisted in constructing rainwater harvesting tank and Eco-San toilets as model.
 9. An international workshop was conducted on Inclusive, gender and justice approaches in water-based livelihoods that was co-supported by the SaciWaters-CapNet Network.





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05

Project name

Ensuring safe and sustainable drinking water needs for all in five 'vandhs' of Rapar block in Kachchh district, Gujarat (Gap support)

Partner

Samerth Charitable Trust

Partner Profile

Samerth is a non-profit development organization that works towards accelerating a humane, sustainable and equitable society. The focus is on improving the conditions of marginalized communities.

<http://www.samerth.org/>



Duration

December 2009 – April 2010 (5 months)

Budget (INR)

9 Lakhs

Project location

8 villages in the Kachchh district of Gujarat

Reach

This project directly benefitted more than 2,500 people and indirectly benefitted over 500 people

Project summary

Samerth and Arghyam have partnered since 2007 to provide safe drinking water to people living in remote hamlets of Kachchh district. This project was a sub-set of a larger project in order to work intensively in a few hamlets to create model WatSan villages. The project provided families in this region with safe and sustainable drinking water by promoting conjunctive use by developing local water sources and accessing Narmada water wherever feasible. A key objective of the project was to promote safe sanitation practices, toilets were constructed and hygiene messages were imparted.

Outputs

1. Local water source creation and renovation of existing water sources.
 - Water harvesting structures and open well constructed.
 - 10 bio-sand filters installed.
 - 10 hand pumps installed.
 - 3 mini water supply projects revived.
 - Access to Narmada water was made easier by laying of pipelines from the main line to the village and construction of storage tank.
2. Participatory management of water resources ensured through creation of Water User Groups or Pani Samitis.
3. Awareness building workshops were conducted on sanitation and hygiene practices.
4. Sanitation hardware was installed in a number of villages.
 - More than 35 families were motivated to construct single pit toilets.
 - More than 15 families were motivated to construct soak pits.
5. A successful Information, Education and Communication (IEC) component ensured that the people came forward to contribute Rs. 1 Lakh towards the project activities.



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Project name

Leveraging NREGS effectively for meeting drinking water needs of the poor and unreached in Rapar block of Kachchh district, Gujarat (Phase II).

Partner

Samerth Charitable Trust

Partner Profile

Samerth is a non-profit development organization that works towards accelerating a humane, sustainable and equitable society.

The focus is on improving the conditions of marginalized communities.

www.samerth.org

Project summary

In Phase I, Samerth created water harvesting structures in Kachchh district to tackle water shortage. The second Phase showcased the work done in Phase I to Gram Panchayats and block level officials. The model of creating decentralised water supply systems for remote tribal hamlets was scaled through convergence with the National Rural Employment Guarantee Scheme



06



Duration

July 2009–August 2012 (38 months)

Budget (INR)

48 Lakhs

Project location

20 Gram Panchayats in Kachchh district of Gujarat

Reach

This project has directly benefitted around 50,000 people & indirectly benefitted 10,000 people

(NREGS). Access to Narmada water was also ensured to promote conjunctive water use in lean months. The project strengthened governance and integrated the voices of far flung habitations into the Gram Sabha.

Outputs

1. Eleven earthen check dams and 11 dug wells constructed to provide decentralised drinking water to 20 Gram Panchayats. Attention was also paid to water quality issues.
2. Wherever issues of scarcity and quality were persistent, communities were mobilised to demand connection to Narmada water supply.
3. Governance processes established at the habitation level through mini Gram Sabhas which could carry the voices of the habitations into the main Gram Sabhas.
4. Twenty-four Pani Samitis established. These Pani Samitis practice savings and manage their local water structures.
5. Hydrogeological plan for Rapar was prepared and used in advocacy with various government agencies.
6. 3,230 population trained for implementing MGNREGS in 4 Gram Panchayats.
7. Awareness about sanitation issues and menstrual hygiene management was generated.
8. 33 families were motivated to construct single pit toilets. A demonstration Eco-San unit was also constructed.
9. Around Rs. 1.3 Crores—was leveraged from NREGS work



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07

Project name

Internship programme for rural youth and students on groundwater management in Kachchh district, Gujarat

Partner

Arid Communities and Technologies (ACT)

Partner Profile

ACT, a non-profit organization working in Kachchh region of Gujarat, aims to strengthen the livelihoods of communities in arid and semi-arid regions by resolving ecological constraints through facilitation or by providing access to technologies and by engendering technological and institutional solutions.

www.act-india.org

**Duration**

November 2008 – October 2011
(36 months)

Budget (INR)

17 Lakhs

Project location

The Kachchh district of Gujarat

Reach

This project helped train 15 para hydrogeologists

Project summary

Sustainable exploration, development and management of groundwater requires a specialised human resource base. However, there is a dearth of specialisation in this field. In this project, ACT created an internship to train people from local communities to understand geohydrology better and plan water management based on that. This programme helped them formulate strategies for management of groundwater on the basis of mapping and identification of aquifers with practical training in Mundra taluka.

Outputs

1. Development of a curriculum for a 45-day programme for *parabs* that included 20 days and 25 days field work.
2. A total of 15 para hydrogeologists (*parabs*) from three batches were trained.



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08

Project name

Regenerating drinking water and reducing salinity in the little Rann of Rapar Block of Kachchh, Gujarat (Phase I)

Partner

Samerth Charitable Trust

Partner Profile

Samerth is a non-profit development organization that works towards accelerating a humane, sustainable and equitable society. The focus is on improving the conditions of marginalized communities.

<http://www.samerth.org/>



Duration

April 2007 – March 2009 (24 months)

Budget (INR)

21 Lakhs

Project location

16 villages in the Kachchh district of Gujarat

Reach

This project directly benefitted more than 3,100 people and indirectly benefitted over 5,600 people

Project summary

The project predominantly covered areas occupied by the Koli tribals. They live in scattered hamlets that are cut off from the main revenue village and lack access to basic infrastructure facilities. There is a high degree of distress migration from these hamlets. People did not have access to drinking water sources, especially in summer months and during droughts and depended on *Veerdas* — a hole dug in the riverbed. Through this project, construction and revival of water harvesting systems, provision of water testing facilities and reduction in salinity were ensured.

Water sources for drinking, bathing and livestock were also separated and hygiene practices were improved. This helped improve the quality of life of the people and helped reduce distress migration.

Outputs

1. Over 650 families have directly benefited by accessing drinking water.
2. Nineteen Water User Groups or Pani Samities were formed.
3. Training was conducted for the Pani Samities to boost confidence levels and help them effectively place their demands to the local Panchayats.
4. Over 15 traditional rainwater harvesting structures, *talabs*, were revived.
5. Over 15 open wells were constructed.



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09

Project name

Providing decentralised domestic water to households in Abdasa Taluk (Phase I)

Partner

Sahjeevan

Partner profile

Sahjeevan is a knowledge resource organization. It creates viable models, demonstrates through communities and encourages the State and other stakeholders to adopt these for scaling. The organization also provides regional planning, training and coordination support for large scale implementation.

<http://www.sahjeevan.org/>

Project summary

Kachchh, the largest district in the country, is affected by cyclical droughts. Sahjeevan,



Duration

January 2007 – March 2011 (51 months)

Budget (INR)

1.6 Crores

Project location

135 villages in the Kachchh district of Gujarat

Reach

This project directly benefitted more than 82,000 people and indirectly benefitted over 1.13 Lakh people

which has worked in this area for over two decades, introduced a community-centric, decentralised drinking water model to help the villages in Kachchh achieve water security. Called 'Pani Thiye Panjo' meaning 'Let us make this water ours again', the project assisted over 100 villages to develop their own water sources. This project was developed as a multi-stakeholder programme with three funding agencies – Water and Sanitation Management Organisation (WASMO) - the state government's agency to assist in providing rural water and sanitation, Arghyam and Suzlon Foundation. The implementation of the programme was carried out by Sahjeevan, and 3 partner NGOs. Some of the main outcomes include:

- ▶ Groundwater protection guidelines prepared and implemented in 5 villages. This helped Pani Samitis manage the shared aquifer judiciously.
- ▶ Conjunctive use of water resources was ensured. Multiple water sources such as groundwater based piped water supply, hand pumps, rainwater harvesting and dug wells were used to provide water.
- ▶ Successful advocacy with government agencies. WASMO & Gujarat Water Supply and Sewerage Board (GWSSB) acknowledged the need for dual sources of water supply (from centralised distribution and management systems and traditional

water sources), hydrogeology based planning and implementation of drinking water projects and development of a cadre of people who could become barefoot hydrogeologists. Now, around 60 villages have access to drinking water and no longer face water scarcity. As a result of the project around 60 villages have access to drinking water and no longer face water scarcity.



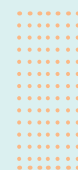
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Outputs

1. Community radio was used effectively to increase awareness in Abdasa & adjoining taluks. Over 10 episodes were aired.
2. The project demonstrated decentralized drinking water source creation as a model for water security.
3. Improved access to good quality, adequate water through construction/restoration of over 50 wells in around 80 villages.
4. Water storage capacity increased in over 20 ponds and in 10 villages. The project also ensured supply of water to livestock and segregation of water sources for human and animal use.
5. The project leveraged over Rs. 4.7 Crores from community contributions, government schemes and other sources.



09



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Project name

Providing drinking water to tribal villages

Partner

N M Sadguru Water & Development Foundation

Partner profile

N M Sadguru Water & Development Foundation has been working in the tribal regions of Gujarat, Madhya Pradesh and Rajasthan for improving the livelihoods of people through water management, agricultural development and community empowerment. Their aim is to help the tribal people break away from the vicious



Duration

January 2007 – March 2008 (15 months)

Budget (INR)

65 Lakhs

Project location

15 villages in Dahod and Banswara districts of Gujarat

Reach

This project has directly benefitted more than 6,000 people

circle of poverty and restore the lost natural resources.

<http://www.nmsadguru.org/>

Project summary

Dahod and Banswara districts receive adequate rainfall. However, in the project villages, a high rate of runoff resulted in low groundwater availability for the tribal communities. The project developed a community managed, sustainable, rural water supply model, aimed at resolving issues around drinking water at the local level. A community based, water supply system was set up to provide safe water to people throughout the year. This was

done by tapping existing water harvesting structures and renovating open dug wells. The capacity of the community to manage their drinking water systems was also enhanced. Health and hygiene were two other important areas the project focused on.

Outputs

1. One rooftop rainwater harvesting structure was constructed.
2. Ten open wells were constructed.
3. Around 15 public stand posts constructed.
4. Over 40 families were motivated to construct bathroom cum toilets.
5. The community contributed over Rs. 18 Lakh towards water and sanitation initiatives.



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Project name

Promoting open defecation free villages

Partner

Utthan

Partner profile

Utthan is an organisation working on gender, livelihoods and decentralized governance issues in rural Gujarat. The focus of Utthan's interventions are on gender empowerment, livelihood security and conflict transformation within the wider framework of promoting gender equality and equity, human rights and improving the quality of life for those on the margins of society. Hence Utthan focuses on Dalits, religious minorities, Adivasis and the poor.

<http://utthangujarat.org/>

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Duration

December 2009 – September 2010
(10 months)

Budget (INR)

15 Lakhs

Project location

Four villages in Bhavnagar and Ahmedabad districts of Gujarat

Reach

This project has directly benefitted more than 2,700 people and indirectly benefitted over 3,000 people

Project summary

Arghyam's partnership with Utthan began in 2008 for sustainable capacity building and developing institutional mechanism at the state level for safe water and sanitation across 21 villages in Gujarat. This project was a sub-set of that larger project. Here, Utthan engaged intensely with four villages to make them open defecation free. Apart from the incentive provided by the sanitation scheme, funds were also leveraged from SHGs and banks. These pilots aimed to influence the villages in the surrounding areas and promote widespread implementation of total sanitation.

Outputs

1. Training sessions conducted for the community and local govt. on construction and maintenance of sanitary facilities and public health.
2. Around 4 Water User Associations were created to prepare village action plans.
3. Sanitation:
 - Over 350 families were motivated to construct single pit toilets, for which over Rs. 14 Lakhs was leveraged.
 - Around 135 families were motivated to construct bathroom cum toilets, for which over 6 Lakhs was leveraged.
4. Over 100 soak pits constructed to help manage waste water.

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Project name

Capacity building to increase gender sensitive, people centered, safe drinking water and sanitation program in rural Gujarat (Phase I)

Partner

Utthan

Partner profile

Utthan is an organisation working on gender, livelihoods and decentralized governance issues in rural Gujarat. The focus of Utthan's interventions are on gender empowerment, livelihood security and conflict transformation within the wider framework of promoting gender equality and equity, human rights and improving the quality of life for those on



the margins of society. Hence Utthan focuses on Dalits, religious minorities, Adivasis and the poor.

<http://utthangujarat.org/>

Project summary

People's Learning Centre for water and sanitation (PLC WatSan) was set up to share and disseminate Utthan's learning and expertise. The central idea of this project was to develop and build the capacity of institutional mechanisms for water and sanitation facilities which are people centred, gender sensitive and demonstrative. This was done by:

- ▶ Creating a resource group model where the group at the community level - Area Resource Group (ARG)

would be supported by District and State level resource groups. The ARGs helped communities gain access to Watsan facilities and derived support from the district and state level groups.

- ▶ Promoting sustainable and appropriate sanitation technologies such as Eco-San.
- ▶ Identification of supplementary credit sources such as microfinance for sanitation.

Duration

May 2008 – October 2010 (30 months)

Budget (INR)

49 Lakhs

Project location

121 villages in Bhavnagar and Ahmedabad districts of Gujarat

Reach

This project directly benefitted more than 52,000 people and indirectly benefitted over 250,000 people

Outputs

1. The overall sanitation & hygiene behaviour in over 100 villages improved due to ARG members' continuous follow-up, extensive training / awareness programmes and demonstration.
2. IEC material on hygiene, Eco-San and safe water were published in local language along with several posters/ handbills. This helped in generating awareness among people.
3. Based on the advocacy efforts by PLC WatSan and Utthan, a government resolution was passed to provide wages for 6 days under MGNREGA, for pit digging for toilet construction.

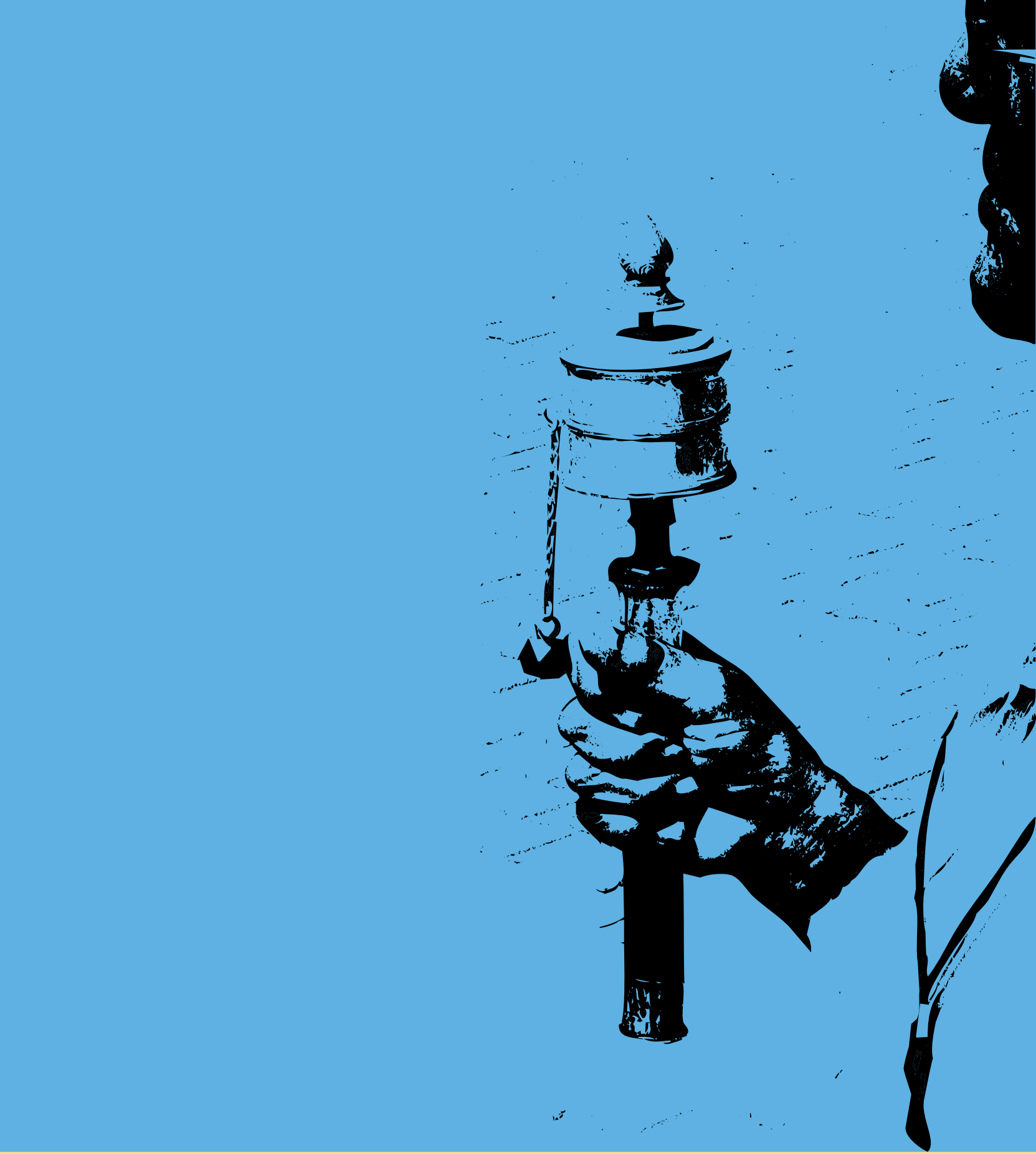


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4. Around Rs. 4 Crores was leveraged from various schemes like Swajaldhara, TSC, WASMO, MFI and people's contribution.
5. Around 45 villages applied to WASMO, TSC and other microfinance federations for support based on project efforts.
6. PLC-WatSan and Utthan became a resource centre on Eco-San technology – it was invited by Himcon and their partner NGOs in Utrakhand to train & demonstrate construction of Eco-San toilets for hilly regions.
7. Village water and sanitation committees (Pani Samitis) in over 100 villages were revived.
8. Over 1,300 families were motivated to construct single pit toilets in their homes.
9. Over 25 Eco-San units demonstrated, and around 700 soak pits constructed.



HIMACHAL PRADESH



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01

Project name

Resource Centre for Promoting Participatory Groundwater Management Principles in the Himalayan Region

Partner

People's Science Institute (PSI)

Partner Profile

People's Science Institute (PSI) is a non-profit organization with a focus in the Indian Himalayan region and the poverty stricken Bundelkhand region. It aims to eradicate poverty through the empowerment of the poor and the productive, sustainable and equitable use of natural and human resources.

peoplescienceinstitute.org

Himachal Pradesh



Duration

January 2011 – March 2014 (39 months)

Budget (INR)

64 Lakh

Project location

5 villages in Sirmour District of Himchal Pradesh

Reach

This project directly benefitted more than 1,400 people

Project summary

The Himalayan states of India are characterised by steep slopes and a tortured geology consisting of highly fragmented and fractured rocks, which is not conducive to the formation of large underground aquifers. Groundwater occurs largely in disconnected localised bodies in joint fractured zones. The main water sources in this region are springs. PSI became a resource centre for Participatory Groundwater Management (PGWM) in collaboration with other NGOs, government departments, and academic institutions. This project helped communities come together and evolve methods to recharge and manage their springs. PGWM principles were

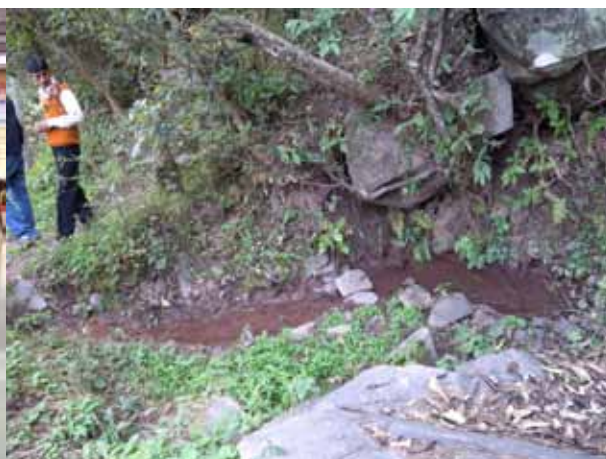
mainstreamed into government schemes such as IWMP.

Outputs

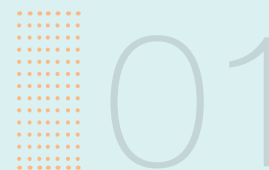
1. Conducted 7 region specific trainings to train 156 participants belonging to NGOs, Watershed Development Team (WDTs), community representatives, Government representatives from soil and water conservation departments, SLNAs, State Government program officials, CGWB etc.
2. Formation and capacity building of 3 water management committees and 7 water user groups in Thanakasoga, Dhayli and Luhali villages.
3. Action research in the Sirmour district involving domestic water supply planning, irrigation facilities, and analysing land use patterns



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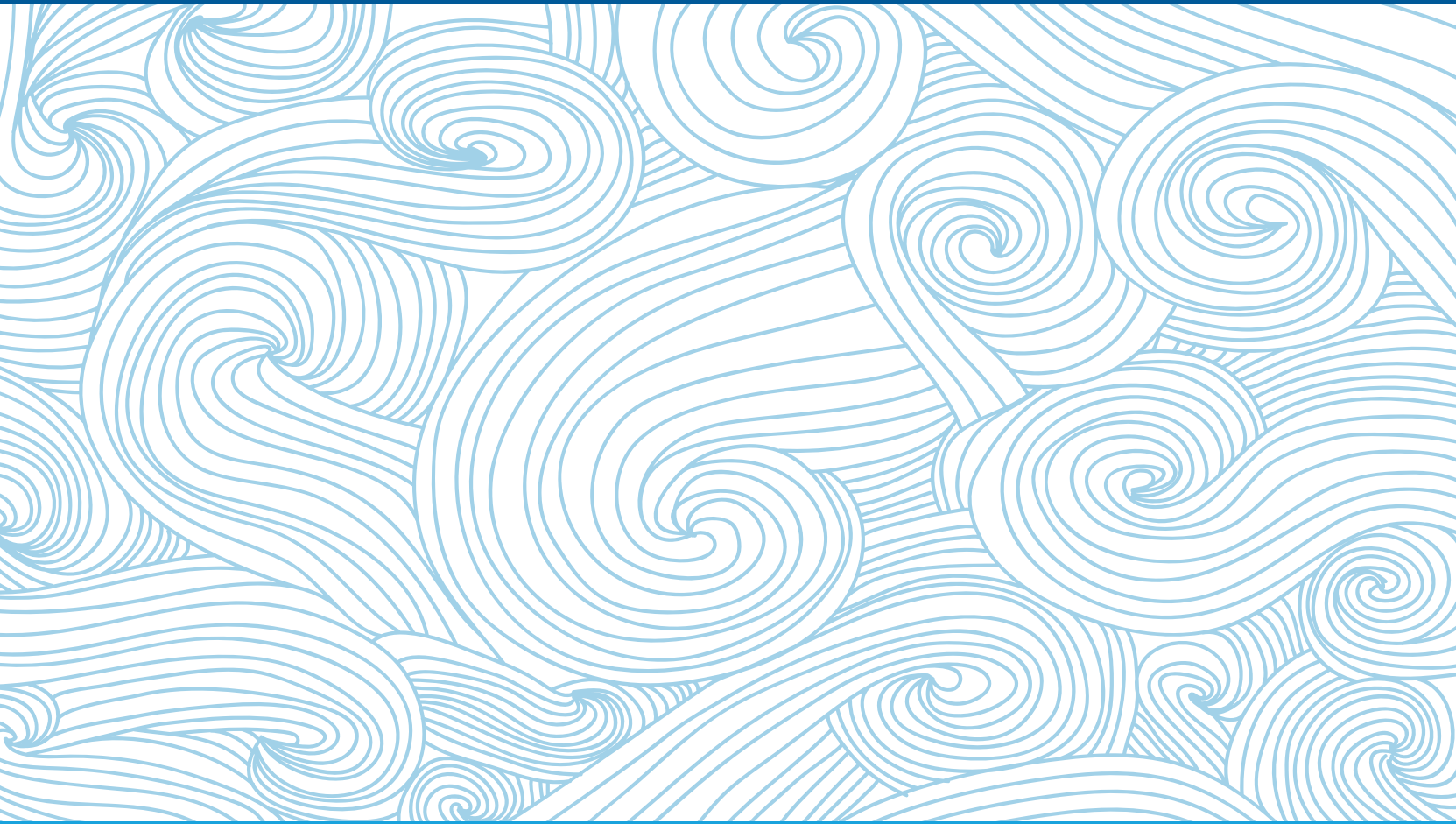


4. Social protection is one of the major outcomes of this programme
5. Hydrogeology based springshed and groundwater planning proved cost effective for optimization of investments and water security
6. Water quality analysis for selected baoris in Thana Kasoga panchayat.
7. A one day exposure visit for the selected water user group members to Thakurdwara village to convince the villagers that groundwater management is important and can enhance their livelihood possibilities.
8. Advocacy to incorporate aquifer management into mainstream watershed and drinking water programmes using hydrogeology as a tool and to focus on issues of equity and quality of groundwater as it is a common pool resource.
9. Nursery plantation of 5,000 saplings to increase the rate of groundwater recharge and to mitigate fodder scarcity problems in the action research villages.
10. School awareness campaigns to build up relations with the community and to make the children understand the importance of water and sanitation.





JAMMU & KASHMIR



01

Project name

Promoting sustainable use and management of groundwater in Leh town in the state of Jammu & Kashmir

Partner

Ladakh Ecological Development Group (LeDeG)

Partner Profile

LEDeG is a non-government organization based in Leh. Since its formation, it has consistently worked towards serving

the underprivileged people residing in structurally disadvantaged areas of Ladakh and has been striving to address the environmental and cultural issues affecting the people in the region due to conventional developmental initiatives.

<http://www.ledeg.org/>

Project summary

Groundwater is the largest source for domestic water supply in Leh district of Ladakh. While the demand for water is increasing, the primary source for

Duration

April 2010 – March 2013 (36 months)

Budget (INR)

Rs. 39 Lakhs

Project location

Leh district of Jammu and Kashmir

Reach

This project directly benefitted more than 28,000 people

groundwater i.e. snowfall continues to decrease. To tackle this problem, LeDeG created a comprehensive approach to sustainable use and management of water in Leh.

The project involved generating scientific knowledge about groundwater, and identifying sustainable technological solutions. The project helped disseminate information among the user groups and decision makers.

Outputs

1. Household survey of water usage among domestic users was conducted and data analysed.
2. Understanding of water situation gained through comprehensive scientific studies.
3. Team trained in decentralized solid waste management
4. Suggestions were given to communities in the intervention sites on solid waste management and water quality testing for fecal contamination.
5. Rs. 12.23 Lakhs were leveraged to implement this project.



JHARKHAND



80

81

01

Project name

Promoting safe water, sanitation and hygiene practices in tribal villages of Ranchi district (Jharkhand)

Partner

Francois-Xavier Bagnoud (FXB) India Suraksha

Partner Profile

FXB India Suraksha is a non-government organization dedicated to working for the rights of vulnerable children, especially those infected and affected by HIV/AIDS and poverty in India.

www.fxbsuraksha.in



Duration

March 2012 – March 2013 (12 months)

Budget (INR)

21 Lakhs

Project location

10 villages in Ranchi district of Jharkhand

Reach

This project directly benefitted more than 8,000 people

Project summary

In rural areas of Jharkhand access to safe water and effective waste management is either inadequate or absent. The project assessed health risks due to existing practices and potential in intervention sites. Awareness was then generated through an intensive communication strategy. This created demand for promotion/maintenance of sanitation facilities in schools and households. It also led to facilitation of community access to government schemes and programmes.

Outputs

1. Access to safe drinking water in 10 villages.
2. Twenty-one handpumps, and 10 *daris* (shallow well) and *kuans* (open well) were revived for community use.
3. Fifty-seven youth trained to maintain water sources in the intervention villages.
4. All important water sources in at least 7 villages managed by the community.
5. Twenty-four health camps conducted on safe sanitation practices.
6. Improved hygiene and sanitation behavior practiced in all 1,523 households in the 10 intervention villages.
7. Fourteen garbage pits used by the community.
8. Open defecation minimized to at least less than 30% in all the 10 intervention villages.
9. Positive impact on the health of the beneficiaries especially women and children. Progressive reduction in the number of cases of diarrhea and other water borne diseases.
10. Forty women/youth (4 per village) trained to take village issues to the government.



KARNATAKA



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01

Project name

Mentoring young professionals to facilitate community-led actions for improved water and sanitation in North Karnataka

Partner

Society for Community Participation and Empowerment (SCOPE)

Partner Profile

SCOPE is a non-profit organisation that focuses on development in the areas of sustainable livelihood, natural resource management, conservation of bio diversity, improved quality of life

and environment, through community participation

www.scopedharwad.org

Project summary

In several parts of rural India, functioning water and sanitation schemes and infrastructure exist. Yet, communities are often not able to maximize use of these schemes and facilities. To do this, it is important that they understand technical aspects and operation and management of water and sanitation systems. One way to do this is by embedding young professionals within these communities to help develop local



Duration

March 2012-June 2014 (28 months)

Budget (INR)

37 Lakhs

Project locations

Dharwad, Gadag districts of North Karnataka

Reach

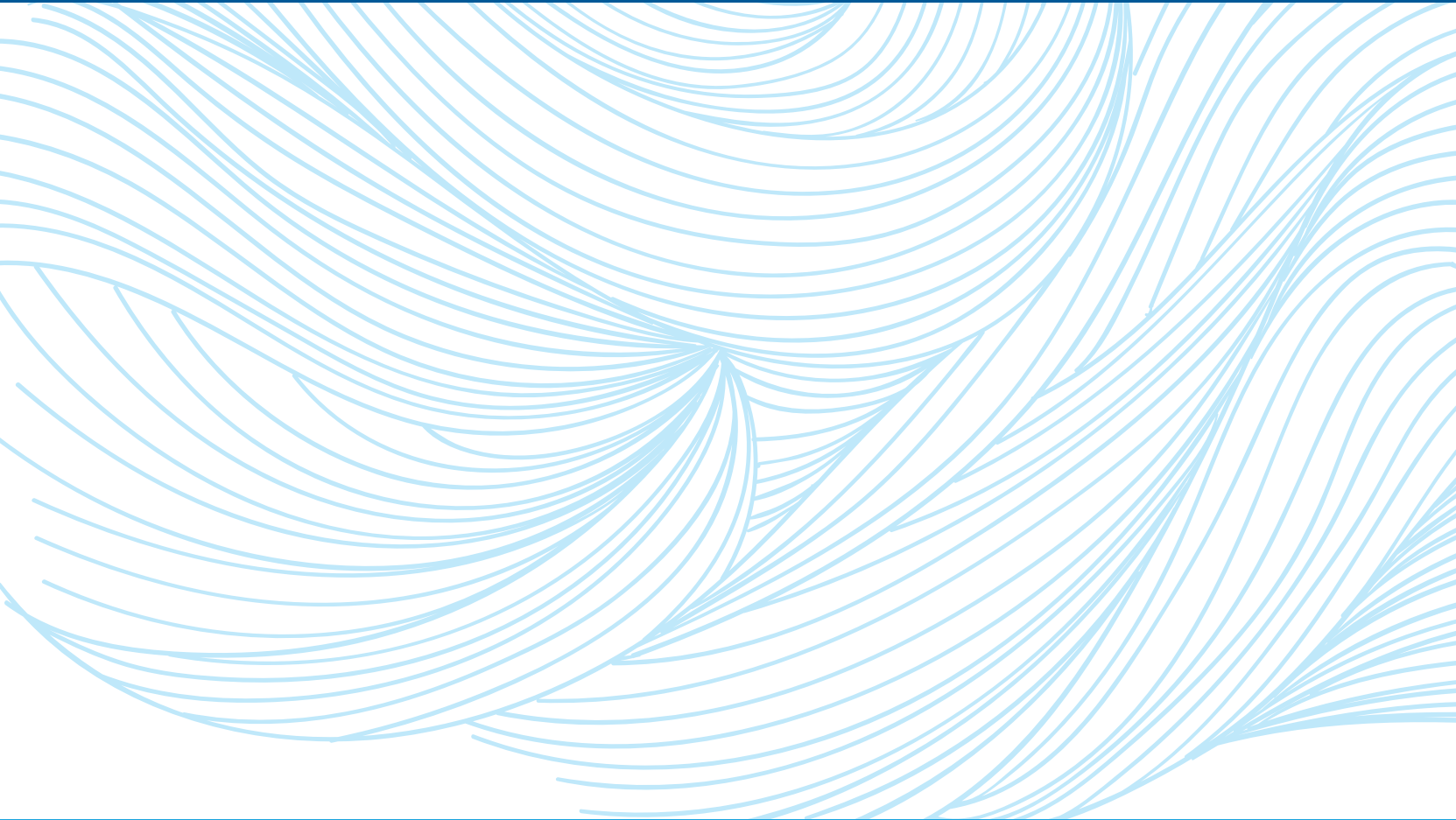
This project has helped train 4 young professionals

leadership and ownership. This project trained four young professionals in water and sanitation management in the region of North Karnataka. This is a first step towards training youth all over India.

Outputs

1. Four young professionals from a pool of graduates and postgraduates in the fields of life sciences and social sciences were selected and trained on water and sanitation management.
2. Induction was given via field training and entry point activities.
3. Training provided in sectors such as:
 - Water quality testing and groundwater management.
 - Engaging with the community and understanding their needs.
 - Critical areas in the field of sanitation, such as Eco-San toilets, design

- and sanitation system models, and sewage treatment.
- Governance, including involvement with Gram Panchayats and participatory planning.



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02

Project name

Ensuring peoples' participation in reviewing and improving water related laws and policies of Karnataka

Partner

Janasahayog

Partner Profile

Janasahayog works towards promoting the constitutionally guaranteed right to life and social justice and to improve quality of life and livelihood of people living in slums in Karnataka through the collective spirit and action. It anchors the Peoples' Campaign for Right to Water – Karnataka.

<http://janasahayog.blogspot.in>

Project summary

There is an urgent need to educate urban citizens about water so they can participate in governance desions. Janasahayog implemented this project to democratize water governance in Karnataka. The project built citizens' awareness about water rights. People, especially those from marginalized communities, were helped to understand the status of their water supply. Opinions and ideas came up through city level consultation meetings. Water journeys (*jathas*) were promoted, leading to mutual city-to-city level exchanges and public

Duration

November 2011 – January 2013
(14 months)

Budget (INR)

12.6 Lakhs

Project location

Bangalore, Mangalore, Chithradurga, Mysore and Gulbarga districts of Karnataka

Reach

This project directly benefitted people in 4 districts of Karnataka

consultations. This formed a collective approach among the people to visualize and campaign for water rights.

Outputs

1. Informed communities that understand and relate to service level and policy level issues around water and sanitation.
2. Training of communities to seek the required information from local level governance institutions to audit and demand democratisation of local governance.
3. Training of communities to negotiate with local administration and to institutionalize participatory community processes to discuss and impact local water and sanitation needs.
4. Improved services and its spin offs in the water quality and sanitation sector.
5. Creating an environment that encouraged the state to engage in audit of its water policies and projects in the last one decade and willingness to roll out a participatory process in drafting a new direction in water access, management and sustenance in the state.



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03

Project name

Gram Panchayat Organization Development (GPOD)

Partners

Foundation for Ecological Security (FES) & Grama Vikas

Partners Profiles

FES' efforts are primarily in locating forests and other natural resources within the prevailing economic, social and ecological dynamics in rural landscapes. It intertwines principles of conservation and local self-governance for the protection of natural surroundings and improvement in the living conditions of the poor. FES presently works with 3,409 village institutions in 27 districts across seven states, and assists

village communities in protecting the 173, 361 hectares of revenue wastelands, degraded forest lands and charagahlands.

<http://fes.org.in/>

Grama Vikas (GV) focuses on protecting rights of children, natural resource management and networking for comprehensive & sustainable development and empowerment of rural poor communities. The organization primarily works in Kolar, Chickmagalur and Raichur districts of Karnataka <http://gramavikas.org/>

Project summary

In 2008-09, Arghyam conducted a household survey of water and sanitation in 172 Gram Panchayats (GP) across



Duration

2011 -2017

Budget (INR)

1.6 Crore

Project location

38 Gram Panchayats in Karnataka, including 30 in Mulbagal taluka, Kolar district

Reach

This project will benefit people in over 450 villages

Karnataka. During its dissemination, it found, that GPs lacked organizational capacity to take corrective action. As a response, it conceived the GPOD to better address issues of last mile service delivery and governance, as mandated in the 73rd Constitution Amendment Act, 1992.

This was an action research project with two GPs in Kolar and Chikkaballapur districts of Karnataka. It enabled GP elected representatives and officials to work closely with management and development experts to strengthen the organisation capacity of the GPs, resulting in tangible improvements in their performance as local self-governments. GPs were also linked with sectoral experts (NGOs, professionals, etc) who could lend their technical expertise

& systemic frameworks to strengthen these government bodies. At the end of the project a framework for GPOD was devised, which was subsequently adopted by 16 GPs in Karnataka.

The GPOD framework is based on proven Organisation Development (OD) principles, which are used for enhancing effectiveness of organisation across different sectors. The premise is that successful change occurs when all components of an organisation are appropriately designed and also aligned, i.e. the vision, skills, incentives, resources, action plan and desired results. The work with the two Panchayats helped evolve certain key foundational principles towards organisation development of GPs.

1) That the GP is pivotal in improvement of service delivery and governance at the last mile.

2) The focus of capacity building should be on building a strong GP organisation, which will enhance their absorptive capacity to leverage different efforts and resources directed at them.

3) Elected representatives can contribute significantly towards the GPs performing their mandated roles.

4) Lastly, a number of policy changes have to be instituted to create an enabling environment for the GPs to function as equal inter-governmental bodies.

In a step towards embedding the GPOD framework into the government, Avantika Foundation in December 2014 signed a



MoU with the Government of Karnataka to work with 30 Gram Panchayats in Mulbagal Taluka, Kolar district, under the Rajiv Gandhi Panchayat Sashaktikaran Abhiyan (RGPSA). Learnings from the above continually strengthen the GPOD.

As the project grew and the potential for scaling it was felt, there was a need to transition the project to an organisation, which could build on the initial research and successes. Since 2014, the GPOD project along with its team has moved to Avantika Foundation, registered in 2012 with a mandate to work on developing the organization capacity of local

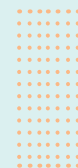


governments, and building leadership among elected representatives, officials and other stakeholders.

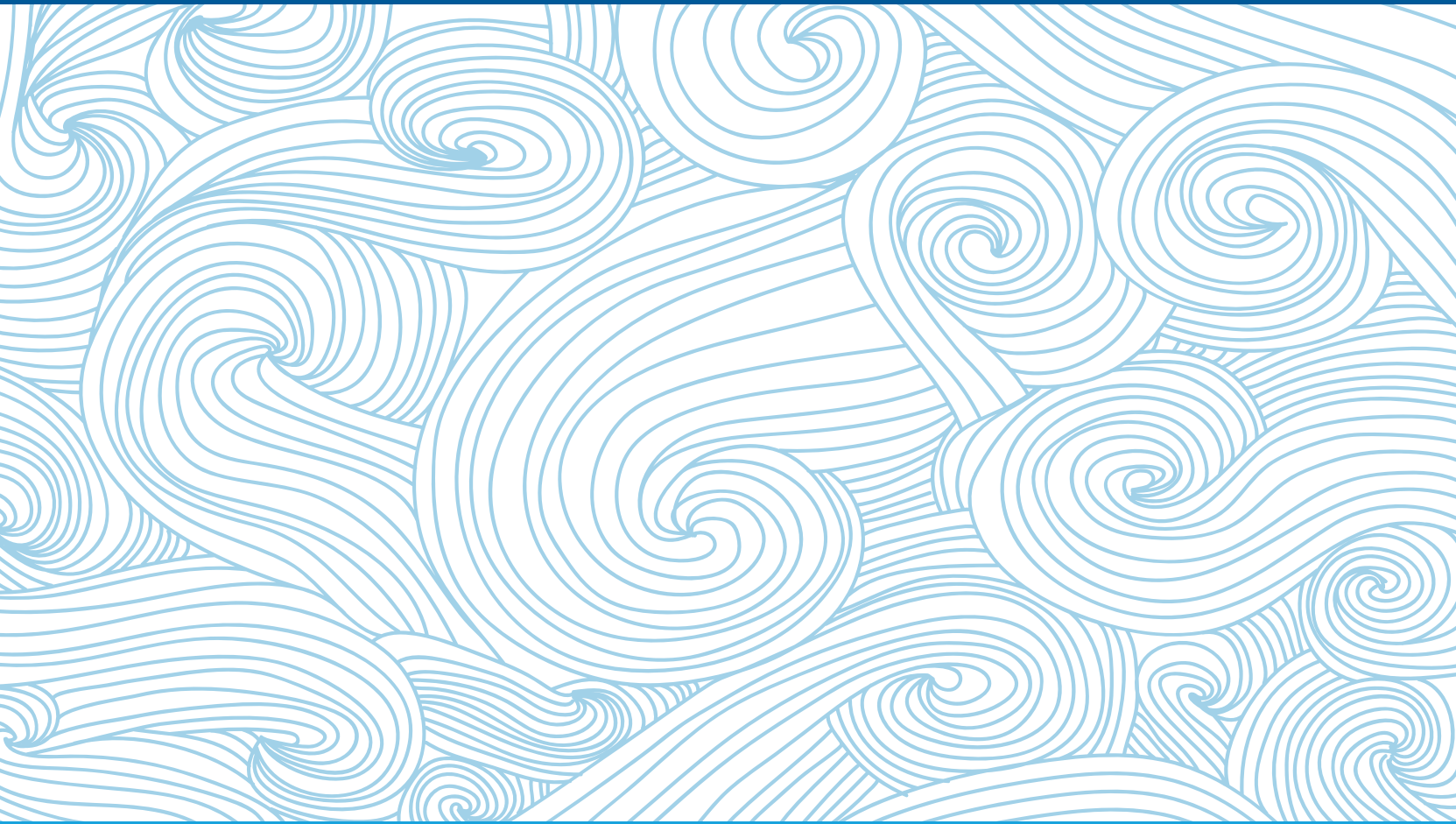
Outputs

1. The two action research GPs, strengthened their accountability structures and systems leading to strong engagement and ownership among elected representatives. This in turn led to higher adherence to their annual plans and service delivery improvements.
2. The framework was subsequently adopted by 16 more GPs and embedded into government policy through a MoU signed under the RGPSA. Learnings feed into solutions towards continually strengthening the GPOD framework.

3. Partnerships have been instituted with academic institutions such as Tata Institute of Social Sciences to build upon the GPOD framework and take it to other states.



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Project name

Munda development project

Partner

Sparsh, National Institute of Technology-Karnataka (NIT-K) and Gajani Foundation

Partner Profile

Sparsh is an initiative of the students of National Institute of Technology Karnataka, Surathkal (NITK). It aims to develop rural regions by linking them with a team of NGOs and sponsors.

<http://www.nitk.ac.in/>

Duration

July 2010 – April 2011 (10 months)

Budget (INR)

3 Lakhs

Project location

1 village in Dakshina Kannada district of Karnataka

Reach

This project directly benefitted more than 100 people

The Gajani Foundation was established to undertake socio-educational programmes for creating awareness among women and other socio-economically disadvantaged sections of the people. The organisation also looks to promote/conduct programmes of health promotion, prevention of disease, environmental protection, alternative systems of medicine; and sustainable living practices.

<http://gajani.org/>

Project summary

This project was an initiative conceived by students from the National Institute of Technology-Karnataka, who started a group called Sparsh in collaboration with

Gajani Foundation. The project sought to ensure water security in a coastal village of Karnataka with high salinity intrusion. Arghyam provided technical expertise and financial support.

Outputs

1. Five community rainwater harvesting structures were built.
2. Over Rs. 5 Lakh was leveraged from multiple sources.



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Project name

ASHWAS: A Survey of Household Water and Sanitation

Partners

BAIF Institute for Rural Development-
Karnataka, Tiptur

Bhageerath, Dharwad

Centre for Rural Studies, Manipal
University

Citizens Forum for Mangalore
Development, Mangalor

Development Alternatives, Gulbarga/
New Delhi

Geo Rain Water Board, Chitradurga

Initiatives for Development Foundation,
Bangalore

Janahitha, Raichur

Karuna Trust, Mysore

People's Organisation for Wasteland and
Environment Regeneration, Bijapur

Public Affairs Centre, Bangalore

Shri Linga Basaveshwar Gramodyoga
Seva Sangh, Dharwad

SNEHAKUNJA Trust, Honavar

Vanasiri Rural Development Society,
Haveri

VIKASANA Institute for Rural and Urban
Development, Mandya

VIKASANA Organisation for Education
and Social Development, Chikmagalur.



Duration

2008 - 2009 (12 months)

Budget (INR)

85 Lakh

Project location

28 Districts in Karnataka

Reach

17,200 households in 172 Gram Panchayats (GPs) were surveyed

Project summary

ASHWAS – A Survey of Household Water and Sanitation is a participatory survey conducted by Arghyam in Karnataka in 2008-09.

The Survey covered 17,200 households in 28 districts of Karnataka. It helped bring to light the status of water and sanitation in Karnataka from a citizen perspective.

The survey encouraged villagers to participate not only to provide their views on the water and sanitation issues but also to test water quality.

The findings from ASHWAS provided quantitative feedback on user perceptions of services, information on status, quality, adequacy, distribution, reliability and efficiency of water and sanitation services. The report also highlighted the health and hygiene status and governance issues.

On November 17, 2009 Arghyam received the Bronze Excellence in the Information Integrity (EI) Award in non profit category for the ASHWAS project at a function in Illinois, USA.

The reports were shared with the GPs for further action.

Outputs

1. Report card of sampled GPs, highlighting issues, suggesting best practices and include solutions was published. The objective of the report card was to share the results with the respondents and GPs in order to enhance a shared understanding of the problems.
2. A State Report on all 28 districts was published.
3. ASHWAS Process Handbook: Planning and Execution guide for participatory surveys on household water and sanitation published.



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Project name

Monitoring and documentation of effects of endemic fluorosis on local population and the results of Sachetana project initiatives for fluorosis mitigation

Partner

BAIF Institute for Rural Development- Karnataka (BIRD – K)

Partner profile

BIRD-K is a voluntary organization that is committed to provide sustainable livelihood to the rural poor through management of natural resources and promotion of livestock development,

watershed development and agri-horti-forestry as major income generation activities.
<http://www.birdk.org.in/>

Project summary

The Government of Karnataka and BIRD-K engaged in finding a permanent solution for fluorosis in three districts of Karnataka through Sachetana, the Fluoride mitigation project of the government and BIRD-K. Arghyam's grant added value to this effort by supporting the awareness building and monitoring aspects of the project.



Duration

September 2006 – March 2010
(43 months)

Budget (INR)

36 Lakhs

Project location

60 villages in Gadag, Tumkur and Kolar districts of Karnataka

Reach

This project directly benefitted more than 27,000 people and indirectly benefitted over 90,000 people

Community level activities to improve knowledge, awareness and practice such as action research, monitoring and documentation, were conducted. Through the combined efforts of all the stakeholders, the project succeeded in its objectives and helped reduce fluorosis. People in the 60 project villages have access to safe drinking water and an increased awareness about different technologies to access safe water.

Outputs

1. Successful identification of gaps in the Government scheme and plugging these through a variety of interventions ranging from hydro geological studies to health camps.
2. Extensive awareness building activities conducted in the villages ensured active community participation in the programme.
3. Scientific studies conducted:
 - Hydrogeology studies for understanding the causes for Fluorosis and assistance in effective recharge process for diluting the fluoride in underground aquifers.
 - Mapping of fluoride affected sources.

4. Rainwater harvesting:

- Rooftop rainwater harvesting undertaken by 4163 households.
- Data collection of water levels and usage.



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07

Project name

Integrated Domestic Water Management in Kolar district

Partner

MYRADA

Partner profile

MYRADA has been the one of the pioneer organizations which builds institutions of the poor and marginalized which are appropriate to the resource to be managed, and the objective to be achieved. They work to ensure sustainable development of rural areas and improving quality of life.

<http://myrada.org/>

Project summary

MYRADA adopted a 3 tier, lifecycle approach to water management:

Supply augmentation and source sustainability: In cases where demand was greater than supply, this was done through rainwater collection, increasing the capacity and improving the quality of surface water sources for domestic use and replenishing underground water sources.

Improving water governance: The project worked with the people and the representatives of the local government to bring in measures to ensure optimal usage of water. Measures were taken by the local



Duration

August 2006 – April 2011 (56 months)

Budget (INR)

96 Lakhs

Project location

Two villages in the Kolar district of Karnataka

Reach

This project directly benefitted over 1,500 people

government to regulate groundwater abstraction. Metered water supply was introduced.

Ensuring equity: Water was provided to all households, with residents using multiple sources of water to feed the distribution system.

In addition to ensuring water security the project also focused on sanitation and hygiene awareness and toilet construction were promoted. Eco-San toilets were constructed with a view to promote conversion of waste to manure.

Outputs

1. Baseline studies and geohydrology mapping was done.
2. Training and exposure visits and other IEC activities were conducted for the community.
3. Water sources were created and source sustainability ensured:
 - Over 65 household rooftop rainwater harvesting structures built.
 - 2 borewells were constructed.
 - 2 groundwater recharge structures installed.
 - 240 household water connections established.
4. Several sanitation interventions were undertaken
 - Over 50 families were motivated to construct single pit toilets.
 - Over 120 families were motivated to construct Eco-San toilets.
 - Over 25 families were motivated to construct bathrooms.
 - Over 65 soak pits constructed.
 - Over 25 compost pits built.
5. MYRADA leveraged over Rs. 14 lakhs from the government and community contributions for toilets, pipelines and public water supply connections.



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Project name

Integrated Domestic Water Management

Partner

MYRADA Kaveri Pradeshika Samsthe (MYKAPS)

Partner Profile

MYRADA is a pioneering organisation that builds institutions of the poor and marginalized which are appropriate to the resource to be managed.

MYKAPS was created out of the larger organization MYRADA in January 2008 and they continue to share a common vision and goals.



Duration

August 2006 – March 2011 (56 months)

Budget (INR)

1.04 Crores

Project location

2 villages in H.D. Kote district of Karnataka

Reach

This project directly benefitted more than 2,100 people

Project summary

Two villages in Karnataka were selected to be developed as models for domestic water management. The project ensured integrated domestic water management, including access to piped metered water, sustainability of the source and sanitation. Wastewater management through drains, soak pits and kitchen gardens was implemented. Eco-San was established as an option for sanitation. Conjunctive water use was promoted through rooftop rainwater harvesting. Village level institutions were also strengthened through training and support.

Outputs

1. Baseline studies, hydrology mapping and water quality testing were carried out.
2. Awareness building workshops, exposure visit and training for community and local government was given.
3. Rainwater harvesting:
 - Over 80 household rooftop rainwater harvesting structures were built.
 - 3 schools rooftop rainwater harvesting structures were constructed.
4. One bore well was dug to provide water.
5. Piped water system was put in place through which over 370 household water connections were installed.
6. Three Water User Groups were formed.
7. Water hardware was created partly through leveraging money, over Rs 8 lakhs from community contributions and around 18 lakhs from government schemes.
8. Sanitation measures taken:
 - Over 140 families were motivated to construct double pit toilets.
 - Over 165 families were motivated to construct Eco-San toilets.
 - Around 200 families were motivated to construct soak pits.



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Project name

School rain water harvesting

Partners

S.D.M Mangal Jyothi Integrated School
Basaveshwara Vidya Varadhak (BVV)
Sangha Rural Development Foundation
Dhanya
Model schools - Suvarna Jala
Centre for Study of Culture and Society
(CSCS), Sir Ratan Tata Trust (SRTT)

Partners profiles

Arghyam has worked with different stakeholders to provide water security in schools in Karnataka. They include:

Government: The Suvarna Jala Yojana was initiated by the state government to provide drinking water in 23,683 rural government schools. This scheme, implemented as part of the Karnataka state golden jubilee year celebrations, funded Rs. 7,735 lakh, and was implemented by respective zilla panchayats.

Funding Agency: SRTT works on rural livelihoods and communities and on issues such as education and health. It also provides support for allied trusts.

NGOs: Dhanya implements development programmes in Karnataka, creating opportunities of gainful self-employment for rural families.



Budget (INR)

44 lakhs

Project location

30 schools in 12 districts of Karnataka.

Reach

These projects directly benefitted more than 4,800 school children

Centre for Study of Culture and Society:

CSCS is established by SRTT as an independent institute of higher learning, by a group of academicians. The major thrust of CSCS has been to understand culture in its most inclusive sense - as encompassing the diverse attempts of people to produce meaning of various kinds. The work with CSCS was partially funded by SRTT.

Schools: S.D.M Mangal Jyothi Integrated School, Basaveshwara Vidya Varadhak (BVV) Sangha Rural Development Foundation.

Project summary

The Supreme Court ordered that all schools must provide toilets and drinking water facilities as part of students Right to Education. Arghyam considers access to safe drinking water and sanitation an imperative issue and has helped promote it across Karnataka through several methods:

1. Tackling specific issues of water quantity and quality in schools.
2. Working alongside a government scheme (Suvarna Jala Yojana) to demonstrate successful methods of participatory, safe and adequate water and sanitation provision in schools.

3. Supporting independent requests from schools for funding rainwater harvesting structures to assist them in providing their students with potable water.
4. In all these initiatives, rainwater harvesting systems with an underground storage tank was constructed and children were given hygiene education. Where required, water quality issues were addressed by providing water filters.



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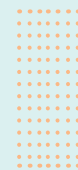
RAIN WATER HARVESTING PROJECT
YEAR OF CONSTRUCTION-2007
COST OF THE PROJECT Rs.2 LAKHS
TANK CAPACITY - 60,000 Ltrs
FUNDS PROVIDED BY: M/S. ARGHYAM TRUST
BANGALORE .



Outputs

1. All schools made water secure.
2. Quality issues, wherever present, were tackled.
3. Children were provided hygiene education. Several student committees set up with tasks designed to give the children a sense of ownership over the water and sanitation systems.
4. Governance system put in place to ensure students have more ability to manage the water systems. A School Development and Management Committee (SDMC) was set up as part of the Suvarna Jala programme with

members of the schools who were equipped with necessary knowledge and skills to carry on the operations and maintenance.



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Project name

Behaviour Change Communication (BCC)
– for rural sanitation

Partner

Rural development and Panchayati
Raj (RDPR) Department, Government
of Karnataka
Zilla Panchayat, Davangere
Centre of Gravity, Final Mile, Public Affairs
Foundation

Partner profile

Rural development and Panchayati
Raj (RDPR) Department, Government
of Karnataka
rdpr.kar.nic.in/

Zilla Panchayat, Davangere
<http://www.zpdavangere.kar.nic.in/>

Centre of Gravity is a communication firm that uses the power of brand strategy and communication to help organisations and movements to create a world that works for everyone.

<http://centrefofgravity.in/>

Final Mile Consulting is the first of its kind consulting firm. Their practice of Behaviour Architecture is developed on the knowledge of cognitive neurosciences and behavioural economics.

<http://finalmile.in/>

Public Affairs Foundation (PAF), a not for profit company, is a knowledge based organisation committed to improving quality of public governance by providing advisory services and customized



Duration

April 2013 – June 2014

Budget (INR)

Rs.1.65 Crore

Project location

25 Gram Panchayats, Davangere district, Central Karnataka

Reach

Around 15,000 households without toilets in 25 Gram Panchayats of Davangere district

knowledge products for promoting social accountability. The Foundation draws its inspiration and conceptual strength from the pioneering interventions and experiences of Public Affairs Centre, Bangalore, India, which developed and perfected a variety of social accountability tools.

<http://www.pafglobal.org/>

Project summary

The Government of India's flagship rural sanitation programme, the Nirmal Bharat Abhiyan or NBA (Swachh Bharat Mission since 2014), offers a subsidy to construct individual household toilets. Recognising that Information, Education, Communication (IEC) are key components to its success, the government had allotted 15% of the NBA budget for

efforts in demand generation for improved sanitation. While the government has given flexibility to the states to design and implement interventions to convince people of the need for good sanitation, few states have been able to implement sound communication strategies, and as a result the budget earmarked for IEC remains unspent and demand not generated.

Arghyam identified communication as an issue within the NBA, and partnered with Government of Karnataka to work on this. Arghyam facilitated the development of a professional communication campaign by roping in a communication partner Centre of Gravity (CoG). After intensive ethnographic research in selected villages CoG developed a

communication strategy based on universal emotional motivations. They also developed creative materials like audio-visual aids, small media and print material for an intensive on-ground campaign. After piloting the campaign in a few villages, it was deployed in 25 GPs across the six talukas by the district administration harnessing local resources and IEC budgets under the NBA. While the target was to roll out the campaign in 50 GPs, in January-February 2014 the campaign was rolled out in 25 GPs only due to the impending general elections in 2014.

Another project partner, Final Mile piloted the development of behavioural nudges to address the behaviour issue



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related to non-use of constructed toilets. By applying learnings from cognitive neurology and behavioural economics, Final Mile tried to influence toilet use behaviour.

Arghyam also partnered with Public Affairs Foundation, a research agency to do baseline study of sanitation and toilet ownership in the district, which set the base for measuring the effectiveness of the communication intervention. PAF provided a research design that enabled selection of intervention and comparison areas within the district, as well as monitored the rollout of the campaign. PAF also carried out an endline survey to measure the impact of the campaign in May 2014.

Outputs

1. About 5,100 toilets constructed in the 25 Gram Panchayats where the campaign was run in a period of 4 months.
2. A communication strategy for creating demand for toilets in rural Karnataka was developed.
3. Three films produced: one depicting the story of a responsible father, the second – a promise from the CEO and ZP President to deliver the incentive in 20 days and the third – testimonials of people who have built and are using toilets.
4. Two jingles produced: one explaining the scheme process and the other about the problems women face as a result of having to open defecate.
5. Pamphlets, posters, door stickers and flip charts around the responsible father theme and the details of the NBA scheme process were designed.
6. A baseline study on the toilet coverage in Davangere and an endline study on the impact of the campaign were carried out.



KERALA



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Project name

Participatory Action Research in 'Mazhapolima' - a community-based open well recharge programme in Thrissur District of Kerala

Partner

Mazhapolima

Partner Profile

Mazhapolima is a community-based open well recharge programme, initiated by the Thrissur District Administration. The programme aims to recharge about 4.5 Lakh open wells in the district, through community awareness and action.

Project summary

Despite regular rainfall, improper water management results in water scarcity in Kerala. To combat this, the Thrissur district administration came up with a rainwater harvesting scheme in collaboration with the Panchayati Raj institutions. The scheme, named *Mazhapolima* i.e. 'plentiful rain', harnessed rain and recharged groundwater through open wells. Arghyam supported the Project Management unit to promote awareness about the importance of rainwater harvesting. The project also facilitated action research on the result of recharging open wells. This project





Duration

May 2009 – October 2012 (42 months)

Budget (INR)

60 Lakhs

Project location

53 Gram Panchayats in Thrissur District of Kerala

Reach

This project directly benefitted more than 40,000 people and indirectly benefitted over 30 Lakh people

helped in the increase of water levels and improvement in water quality.

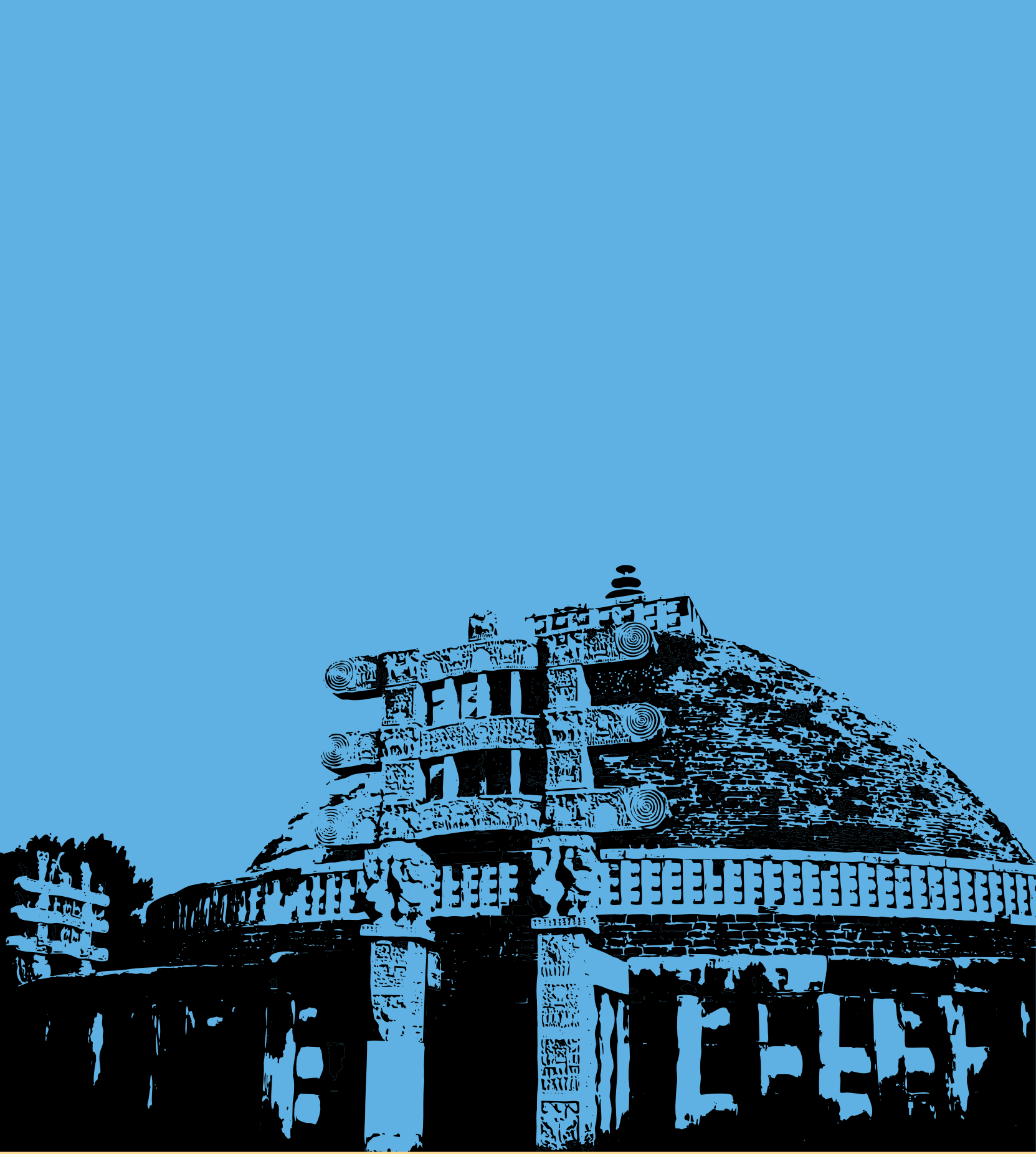
Participatory action research provided information on the successes of the interventions and helped influence policy making in favour of decentralised service delivery and management.

Outputs

1. Over 8,000 *Mazhapolima* open well recharging units were installed. Around 75% of the cost of each unit was funded, and the rest was leveraged from the community.
2. Over 100 crore litres of rainwater percolated to the groundwater table through open wells, as a result of this programme.
3. Research on the quality and quantity of water from the wells was conducted, and action research programmes were conducted in few locations.
4. Volunteers, with the involvement of NGOs and/or *Kudumbesree* Self Help Groups, were trained in well recharging and plumbing so that the wage payment available under

Mazhapolima added to the livelihood security of the people.

5. Lectures were given in schools on the topics of rainwater harvesting, water literacy and water quality.
6. Water community workshops, training programmes on rainwater harvesting and other seminars were conducted.
7. An SMS based system was put into place where the common people can participate by sending the readings of the monthly water level fluctuations to an authorized agency using mobile phones.
8. Around Rs. 2 Crores leveraged from the Government of Kerala and local governments to aid in the installation of the the rainwater harvesting units.



MADHYA
PRADESH



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01

Project name

Improving agricultural livelihoods of marginalized tribal households of Bajna & Sailana blocks of Ratlam district, Madhya Pradesh through sustainable groundwater management.

Partner

Action for Social Advancement (ASA)

Partner Profile

ASA's approach to development is firmly founded upon participatory action at the community level. The main aim of the organization is to provide livelihood security which is facilitated by an intensive participatory process of natural resources development and local institutional development. Particular

Madhya Pradesh



Duration

January 2009 – February 2012 (38 months)

Budget (INR)

65 Lakhs

Project location

10 villages in Ratlam district
of Madhya Pradesh

Reach

This project has directly benefitted over 250 people and indirectly benefitted around 600 people

emphasis is placed on directing efforts toward the poor and women.

<http://www.asaindia.org/index.html>

Project summary

High propensity to drought and rapid soil erosion triggered by high intensity rainfall and high wind speeds leads to sub-optimal storage of water in Ratlam district. Through the use of watershed interventions the project was able to improve sub-surface water availability. The project also constructed open wells on the basis of hydrogeological understanding. Keeping drinking water security as a non-negotiable, the interventions also helped improve agricultural productivity

through sustainable groundwater management and transfer of knowledge on appropriate agricultural practices.

These outcomes led to a drop in distress migration and increased drinking water and livelihood security.

Outputs

1. Water security plans made based on hydrogeological mapping.
2. Community training and awareness building workshops conducted.
3. People were taken on exposure visits to gain understanding on improved agronomic practices.
4. Water Users Groups were formed for regulating water use and ensuring sustainable management.
5. Rainwater harvesting structures were set up:
 - Ten community rainwater harvesting structures built.



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- Two rainwater harvesting structures revived.
- 6. More than 150 open wells were constructed.
- 7. Old open wells were selected for renovation, based on hydrogeological evaluation.
- 8. More than 15 hand pumps were installed to help improve access to drinking water.
- 9. Seven farm ponds were constructed.

- 10. Fifteen families were motivated to construct single pit toilets and more than five families were motivated to construct double pit toilets.
- 11. More than a 100 families were motivated to cultivate kitchen gardens.



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02

Project name

Water for all and always – Holistic water management project in Bundelkhand Region

Partner

Development Alternatives (DA)

Partner profile

DA envisions a world where every citizen can live a secure, healthy and fulfilling life, in harmony with nature. DA works with a mission of creating sustainable livelihoods. The main focus areas are employment generation, skill development, a clean environment and fulfilling basic needs.

<http://www.devalt.org/>

Madhya Pradesh + Uttar Pradesh



Duration

July 2006 – May 2011 (59 months)

Budget (INR)

2.42 Crores

Project location

11 villages in Tikamgarh and Jhansi districts of Madhya Pradesh and Uttar Pradesh

Reach

This project directly benefitted more than 8,500 people and indirectly benefitted over 800 people

Project summary

Residents of the Bundelkhand region experience acute scarcity. The project demonstrated a successful model for drinking water supply. This included management of demand and supply, development and strengthening of institutions that take decisions related to water management, and management of sanitation at the personal, household and village level. Conjunctive use of water resources was implemented through groundwater based piped water supply, hand pumps, rooftop rainwater harvesting and revival of dug wells. With closer access to water, drudgery was reduced for women and village

level conflicts also reduced. The project resulted in adequate, reliable and safe water being made available to 95% of households in the project area. The project led to more demand from the local government and communities for implementation of similar programmes in nearby villages.

Outputs

1. Baseline studies, training programmes for staff, exposure visits and awareness building workshops and other IEC activities were conducted.
2. Community level water structures constructed and revived:
 - 1 community rainwater harvesting structure built.
 - 1 school rainwater harvesting structure built.
 - 14 traditional rainwater harvesting structures revived.
 - More than 10 open wells constructed.
 - More than 5 bore wells constructed.

घर बाहर सब स्वच्छ बनायें
हटा गंदगी रोग भगायें

 Development
Alternatives

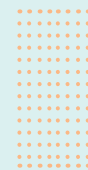
Arghyam
Safe Sustainable Water for all

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- Around 30 hand pumps installed.
 - Over a 100 public stand posts constructed.
 - More than five community filters were installed.
 - Around 9 mini water supply systems were constructed.
3. A number of household hardware interventions were put in place:
- Over 100 household water connections.
 - Over 20 household filters installed.
 - Over 70 rooftop rainwater harvesting structures built.
4. Water quality testing was done to check for bacteriological contamination.
5. Source sustainability was an important part of the project.
- Around 45 groundwater recharge structures were established.
 - More than 5 farm ponds were built.
6. Nine Water User Groups (WUGs) were formed.
7. In order to close the loop on water, sanitation issues were also addressed:
- Over 690 families were motivated to construct double pit toilets.
 - 2 families were motivated to construct Eco-San toilets.
 - More than 80 families were motivated to construct soak pits.
8. A total of Rs. 2.2 Crores was leveraged for the project, of which around Rs. 50 Lakhs was contributed by the community and the rest was leveraged from various government schemes, such as Total Sanitation Campaign and Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS).



02



TO CELEBRATE THE ANNIVERSARY OF THE
INDEPENDENCE OF INDIA
THE KING OF SWAZILAND VISITED
ON THE SECOND OF DECEMBER MONDAY

MAHARASHTRA



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01

Project name

Demonstrating Participatory Groundwater Management (PGWM) in Maharashtra – Towards a scientific policy framework

Partner

Advanced Center for Water Resources Development and Management (ACWADAM)

Partner Profile

ACWADAM, is a non- profit organization working to promote the groundwater hydrogeology and conduct research on water resources, particularly using the science of groundwater, with an emphasis on sustainable and equitable management. It aims to develop



Duration

January 2011 – March 2014 (39 months)

Budget (INR)

73.71 Lakh

Project location

2 villages in Pune and Satara districts of Maharashtra

Reach

This project directly benefitted 3,199 people

‘demystified’ understanding of the science of groundwater from a common pool perspective. It works to improve approaches to watershed development and groundwater management through hydrogeology inputs.

www.acwadam.org

Project summary

Hard rock areas like those in Maharashtra face the twin issues of scarcity and poor quality. Groundwater is the primary source of water in these regions. In this project, ACWADAM acted as a resource centre for Participatory Groundwater Management (PGWM) in collaboration with other NGOs, government departments, and academic institutions.

It helped in identifying sites for action research and assisted them in developing action research design and plan. It developed site-specific PGWM protocols and implemented them. Lessons from the work were shared with NABARD and the Agriculture Department.

ACWADAM also successfully advocated lessons from the work with the State and Central governments. One of the big successes was influencing the National Aquifer Mapping Programme of the Government of India.

Outputs

1. Conducted 19 trainings for civil society groups and individuals interested in understanding hydrogeology. Also conducted community based trainings in project locations in Marathi. 574 professionals were trained.
2. A groundwater management primer specially designed for water practitioners in India was released in English and Marathi.
3. Detailed aquifer mapping and characterization and hydrogeology based watershed and groundwater planning was carried out in Muthalane and Randulabad.
4. As a result of the work community shares groundwater as a common



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pool resource by evolving management protocols.

5. Sensitization of policy makers and civil society organizations on the principles and practices of Participatory Groundwater Management - Seminars and Workshops held through joint resources mobilisation under grants from Arghyam, The Ford Foundation and Tata Trusts.
6. ACWADAM advocated for amendments in Maharashtra Government's Government Resolution on the blanket implementation of "Shirpur" pattern.
7. It spread its work across more sites through collaboration with the Maharashtra Knowledge Foundation.

Work was initiated in 6 villages across Maharashtra.

8. 2 National workshops on PGWM on groundwater management importance of decentralised approaches involving the local communities, and evolving local community norms and regulation of these norms by the local institutions were conducted.
9. ACWADAM helped create a policy space for community centric approaches for aquifer mapping in line with PGWM concept in the National Aquifer Mapping Programme.



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02

Project name

Evolving water self-reliance through surface and groundwater sharing and management

Partners

Gram Gaurav Prathisthan (GGP)
Advanced Center for Water Resources
Development and Management
(ACWADAM)

Partners profiles

Over the past four decades GGP through its Pani Panchayat model has worked towards the creation of an aquifer-based participatory ground water management system. Started by Vilasrao Salunkhe in 1970s, this is a unique model for

sustainable groundwater management.
<http://panipanchayat.org/>

ACWADAM, is a non- profit organization working to promote groundwater hydrogeology and conduct research on water resources, particularly using the science of groundwater, with an emphasis on sustainable and equitable management. It aims to develop 'demystified' understanding of the science of groundwater from a "common pool" perspective. It works to improve approaches to watershed development and groundwater management through hydrogeology inputs.

<http://www.acwadam.org/>



Duration

January 2009 – June 2010 (18 months)

Budget (INR)

50 Lakhs

Project Location

1 village in the Pune district of Maharashtra

No. of Beneficiaries

This project directly benefitted more than 250 people and indirectly benefitted over 600 people

Project summary

Groundwater over-exploitation is a significant problem in many parts of India, especially in groundwater dependent dry land regions such as Maharashtra. However, villages with unexplored groundwater resources often fall within the “dark zones” categorization and therefore are not allowed to access their water resources. In this project, two partners collaborated to help create access to groundwater resources and ensure sustainable management in one such village in Pune district.

GGP implemented the Pani Panchayat model through which it motivated the

people of the village to collaborate to harness their water resources for common good.

GGP used ACWADAM’s scientific understanding and helped the villagers access groundwater in a sustainable manner. This project illustrated the potential of participatory watershed management to address water security issues. Measures such as optimum usage of pumps, modified cropping pattern which could match water availability and raise productivity etc. were adopted.

Findings from this project have the potential to influence small scale appropriate approaches to groundwater/ aquifer management techniques in rural areas.



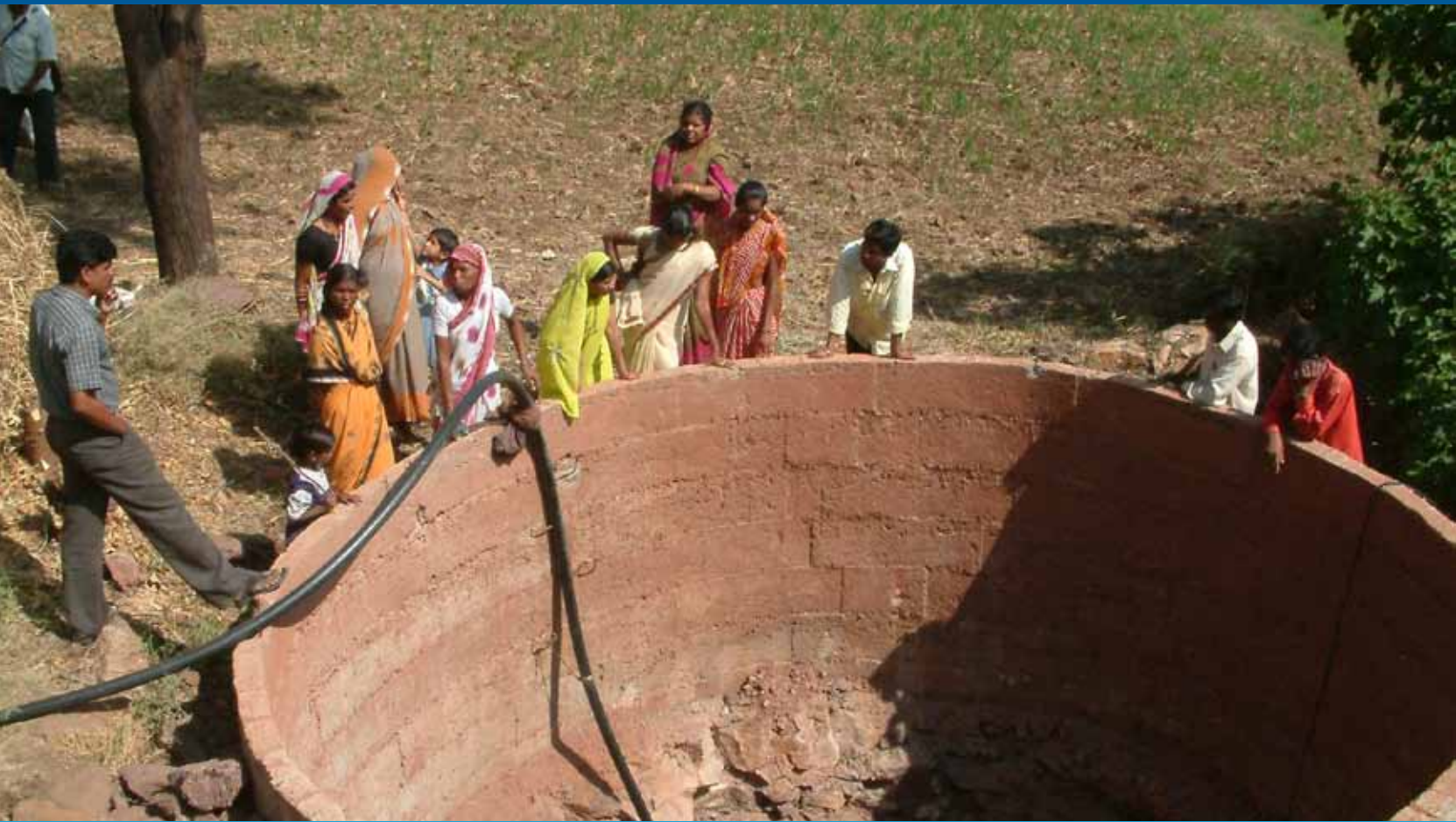
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Outputs

1. ACWADAM conducted extensive hydrogeology studies over a period of 6 months. It was established that though in a dark zone, groundwater in the project villages was untapped.
2. The Pani Panchayat model was adopted - sustainable methods of water utilization with priority to drinking water were evolved, such as
 - Irrigation schemes for farmers,
 - Water allocation based on the family rather than size of land.
 - Cropping restricted to seasonal crops, with low water requirement.
 - Over 550 acres of land was irrigated
3. 10 Water User Groups (WUGs) with around 275 members formed.
4. 10 community lift irrigation schemes were completed.
5. 6 old wells were deepened and over 12 wells were dug.
6. The government granted over 10 electricity connections to community groups (which was unavailable because this was a dark zone) to create water sources in the village
7. Over 10 Self-Help Groups were formed.
8. It was demonstrated to the government and groundwater agencies that aquifer boundaries do not match administrative boundaries and that groundwater status needs to be based on more granular data so that villages which haven't developed their groundwater potential do not get penalized because they are located in a dark zone.



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03

Project name

Integrated Domestic Water Management in Maharashtra

Partner

Watershed Organisation Trust (WOTR)

Partner profile

WOTR is a not-for-profit NGO which provides capacity building and advisory services to developmental practitioners from 22 other Indian states as well as, occasionally, from 27 countries.

WOTR's mandate is to reduce poverty through mobilising the self-help capacities of individuals and communities to regenerate the eco-spaces or watersheds they live in, harvest rain water wherever it falls, use it productively, undertake sustainable livelihoods and do

whatever else it takes to get them out of poverty.

<http://www.wotr.org/>

Project summary

One third of the state of Maharashtra is drought prone as it falls in the rain shadow belt. Another one-third is prone to periodic drought due to irregular and erratic monsoons. The project examined ways to enhance successful implementation of drinking water and sanitation projects to create an Integrated Domestic Water Management model. WOTR worked on an integrated watershed approach, which was useful in strengthening and protecting the water source. All community members now have access to water sources with a reported increase in water levels



Duration

November 2008 – April 2011 (30 months)

Budget (INR)

62 lakhs

Project location

10 villages in Pune, Dhule and Ahmednagar districts of Maharashtra

Reach

This project has directly benefitted more than 4,100 people

and availability. A meter system was introduced, with participatory tariff fixing for recovery of operation and maintenance costs. Awareness about hygiene practices and water budgeting has gone up. Water supply to all schools in the project area has also been secured and the students have been made aware of and also practice good hygiene behavior. Active participation of women in drinking water and sanitation activities was enhanced by organising them in Self-help Groups/Federations. All activities were carried out in coordination with the Gram Panchayats.

Outputs

1. Training on water budgeting was given to people in the project villages.
2. Fixed the defunct government piped water supply systems with improved technologies for equitable water distribution and use.
3. Borewell recharging was done for over 15 borewells.
4. Recovery of operations and maintenance costs achieved through tariff collection.
5. Through the use of IEC material and workshops, awareness was generated on health and hygiene.
6. Over 380 families were motivated to construct toilets and around 5 families were motivated to construct Eco-San toilets.
7. Over 280 soak pits and 320 kitchen gardens were constructed.
8. The project leveraged over Rs. 1.5 Crores, for provision of drinking water and construction of latrines, from Bharat Nirman and Total Sanitation Campaign schemes.



MANIPUR



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01

Project name

Integrated services for enhancing health and hygiene through rural water supply and sanitation in Chingtham village of Thoubal District

Partner

Wangjing Women & Girls Society (WWAGS)

Partner profile

WWAGS focuses its programmes and activities in the area of capacity building, literacy and socio-economic development to improve existing living standard of communities in project areas.



Duration

February 2008 – January 2009 (12 months)

Budget (INR)

9.5 Lakhs

Project Location

1 village in Thoubal district of Manipur.

Reach

This project benefitted more than 1,600 people directly

Project summary

Huge stress on limited water sources in Chingtham village resulted in reduced drinking water availability. The project helped improve awareness on the need for safe drinking water, health and sanitation. It also helped people access safe drinking water. Infection from contaminated water reduced from around 70% at the beginning of the project to 20% at the end. The project also promoted appropriate sanitation technologies such as Eco-San toilets. There was also an increase in women's involvement in planning, decision making and management of water.

Outputs

1. Baseline studies were conducted.
2. Awareness building and training provided the local community.
3. Three community level bio-sand filters constructed next to existing ponds, creating universal access to safe drinking water.
4. Twenty rooftop rainwater harvesting structures were constructed. This gave households access to water and resulted in reducing the drudgery of women as stored water meant lesser trips for water collection.
5. 15 Eco-San toilets were constructed.



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02

Project name

Integrated water and sanitation project at two districts of Manipur

Partner

Youth Volunteer's Union

Partner profile

YVU is an association formed by young dedicated men and women as a voluntary endeavor to make variety of socially and locally based services available to marginalised sections. YVU strongly believes in working together with the local people and particularly with the weaker section of the small and sub-urban communities especially those in inaccessible areas.

<http://yvu.co.in/>



Duration

Phase I: March 2008 – February 2009
(11 months)

Phase II: December 2009 – March 2010
(3 months)

Budget (INR)

15 Lakhs

Project location

3 villages in Senapati and Thoubal districts of Manipur

No. of Beneficiaries

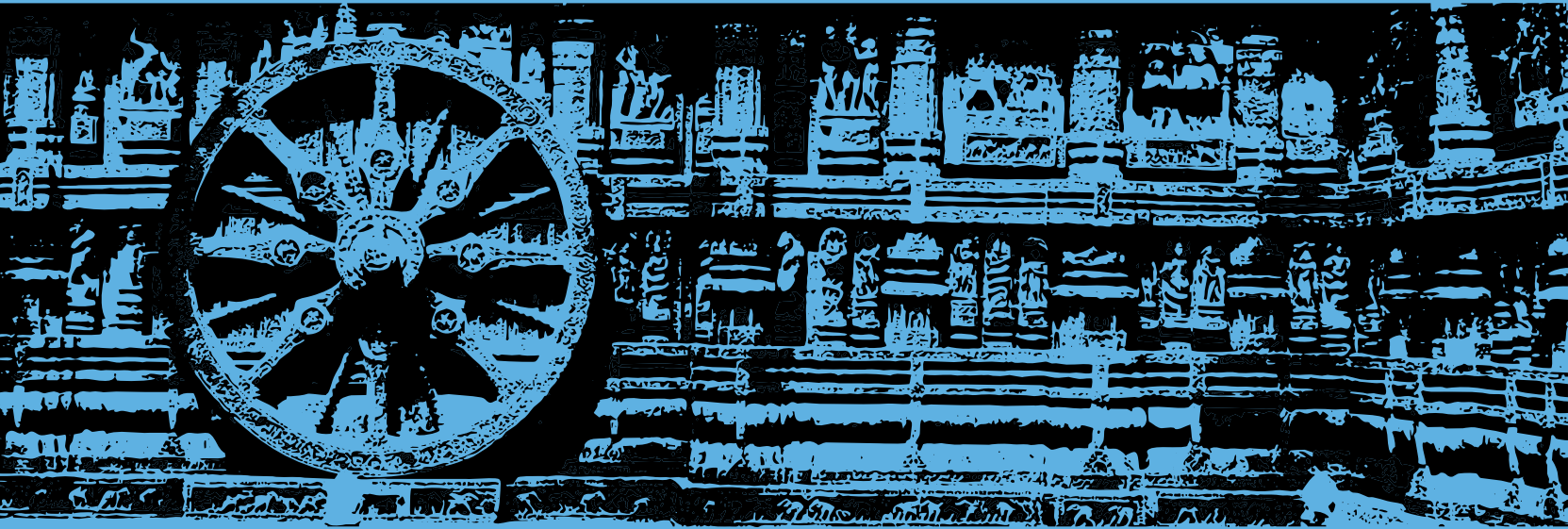
The project directly benefitted
3,000 people

Project summary

The project focused on providing safe drinking water and hygienic sanitary facilities. Rainwater harvesting units were constructed to achieve water security. Awareness about hygienic sanitary practices and appropriate sanitation technology – Eco-San was increased. Incidence of infection from contaminated water decreased substantially at the end of the project. The project also focused on gender empowerment and there was an increased involvement from women in the planning and management of water and sanitation in the village.

Outputs

1. All 200 households of the Charangpat village accessed safe drinking water facilities.
 - 6 household rooftop rainwater harvesting structures constructed.
 - 2 community level bio-sand filters installed.
2. Awareness building workshops and community training undertaken to create awareness on Eco-San and rainwater harvesting practices.
3. Ten Eco-San toilets were constructed as demonstration units.
4. A successful IEC component ensured that the people came forward to contribute Rs 1 Lakh towards project activities.



ODISHA



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01

Project name

Providing community managed water supply systems and sanitation in rural Odisha

Partner

Gram Vikas

Partner Profile

Gram Vikas is a non governmental organisation based in Odisha. It was founded in 1979. It uses common concerns for water and sanitation to unite and empower rural communities, including Adivasi communities. Its mission is to promote processes which are sustainable, socially inclusive and gender equitable to enable critical

masses of poor and marginalized rural people or communities to achieve a dignified quality of life.

www.gramvikas.org

Project summary

Lack of drinking water and sanitation is a huge problem in rural Odisha. Gram Vikas addressed this in its intervention areas through the Movement and Action Network for Transformation of Rural Areas (MANTRA) model. The project implemented by Gram Vikas provided 24x7 piped water supply and toilets to all households. This resulted in improved health and also acted as a vehicle to transform caste/gender



Duration

June 2010 – May 2013 (36 months)

Budget (INR)

1.97 Crores

Project location

30 villages in Ganjam, Gajapati and Rayagada districts of Odisha

Reach

This project directly benefitted more than 8,000 people

based exclusion into fair inclusion. Capable village institutions enabled communities to maintain infrastructure and promote good hygiene practices. Funds for infrastructure were leveraged from the government. Arghyam also set up a revolving fund to cut the delay in accessing money from these government schemes. This money will continue to remain with Gram Vikas for future work in the water and sanitation sector.

Outputs

1. 24 borewells, 7 dugwells and 12 gravity flow units constructed in the intervention sites.
2. Water supply work commissioned in 12 villages.
3. Once water supply work was completed, village executive committees which were trained in handling the operation and maintenance of systems took over management of the systems.
4. Water quality monitoring was conducted to detect bacterial as well as chemical contamination of water sources, using field testing kits.
5. More than 1,600 families were motivated to construct toilets cum bathrooms.
6. Health and hygiene training was conducted for school children and women members to inform them of clean practices, awareness on hand washing, covering food and handling water.
7. People came forward to contribute Rs. 1,000 per household to establish a corpus fund in each village to aid in installing their own facilities.
8. Around 82 Lakhs was leveraged from various government schemes to ensure water supply and sanitation in the target villages. Further, each household received Rs. 4,600 under NBA and Rs. 4,500 under Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS).



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02

Project name

Safe drinking water supply and sanitation project for Puri district

Partners

WaterAid India

Society for Social Unity and Development (SSUD)

Partner Profile

WaterAid has been working in India since 1986 with the goal of enabling improved access to sustainable, safe and adequate water supply and sanitation. It also aims to create a knowledge base for advocacy at different levels and foster an enabling environment for effective programme implementation, in-country funding, organisational learning and growth.

<http://www.wateraid.org/india/>

SSUD aims to support and strengthen the poor people in Puri district. Their aim is to ensure economic empowerment through a number of means including the development of low cost housing and provision of health and sanitation facilities by acting as a servicing as well as a catalytic agency.

Project summary

Water contamination is a severe problem in Odisha with Puri being one of the districts severely affected by water quality issues such as high salinity, iron and biological contamination. This project helped increase awareness among people in affected areas of the impact of poor water quality on health.



Duration

May 2009 – March 2011 (23 months)

Budget (INR)

18 lakhs

Project location

5 villages in Puri district of Odisha

Reach

The project directly benefitted more than 2,000 people and indirectly benefitted over 3,000 people

Water quality mitigation measures were undertaken to reduce the effect of water contamination. The project helped provide safe drinking water and sanitation by creating sustainable technical solutions.

Outputs

1. Awareness created among the community, especially women, about the problem with water quality in hand pumps and ponds.
2. Water quality data made available for management and analysis.
3. Nine iron removal plants using terracotta filters installed at community hand pumps.
4. A UV plant installed for water purification with support from the Gram Panchayat and other local elected representatives to obtain land and electricity.
5. Household filters, provision of alternate water sources were some other measures taken to provide potable water.
6. Resource centre established to help prepare water quality maps and plans to help scale up the demonstrated solutions in other blocks.



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03

Project name

Empowering Gram Panchayats for improved planning and delivery of water and sanitation services using the Water Use Master Plan (WUMP) approach in Gajapati District, Odisha

Partner

Intercooperation Social Development India

Partner profile

Intercooperation has been working in India since 1982, as a project management and implementation partner of the Swiss Agency for Development and Cooperation. Intercooperation works with governments, technical and research

organisations, NGOs and Community Based Organisations (CBOs) on initiatives in rural livelihoods, climate change and local governance.

www.intercooperation.org.in.

Project summary

The 73rd Constitutional Amendment has put the focus on Gram Panchayats as institutions of self-government. This means that Gram Panchayats are responsible to plan and implement numerous central and state government programmes, including delivery of safe, adequate drinking water to people and provision of sanitation facilities. However, this has not been matched by investments in building capacities



Duration

January 2009 – January 2012 (37 months)

Budget (INR)

41 Lakhs

Project location

11 villages in Gajapati district of Orissa

Reach

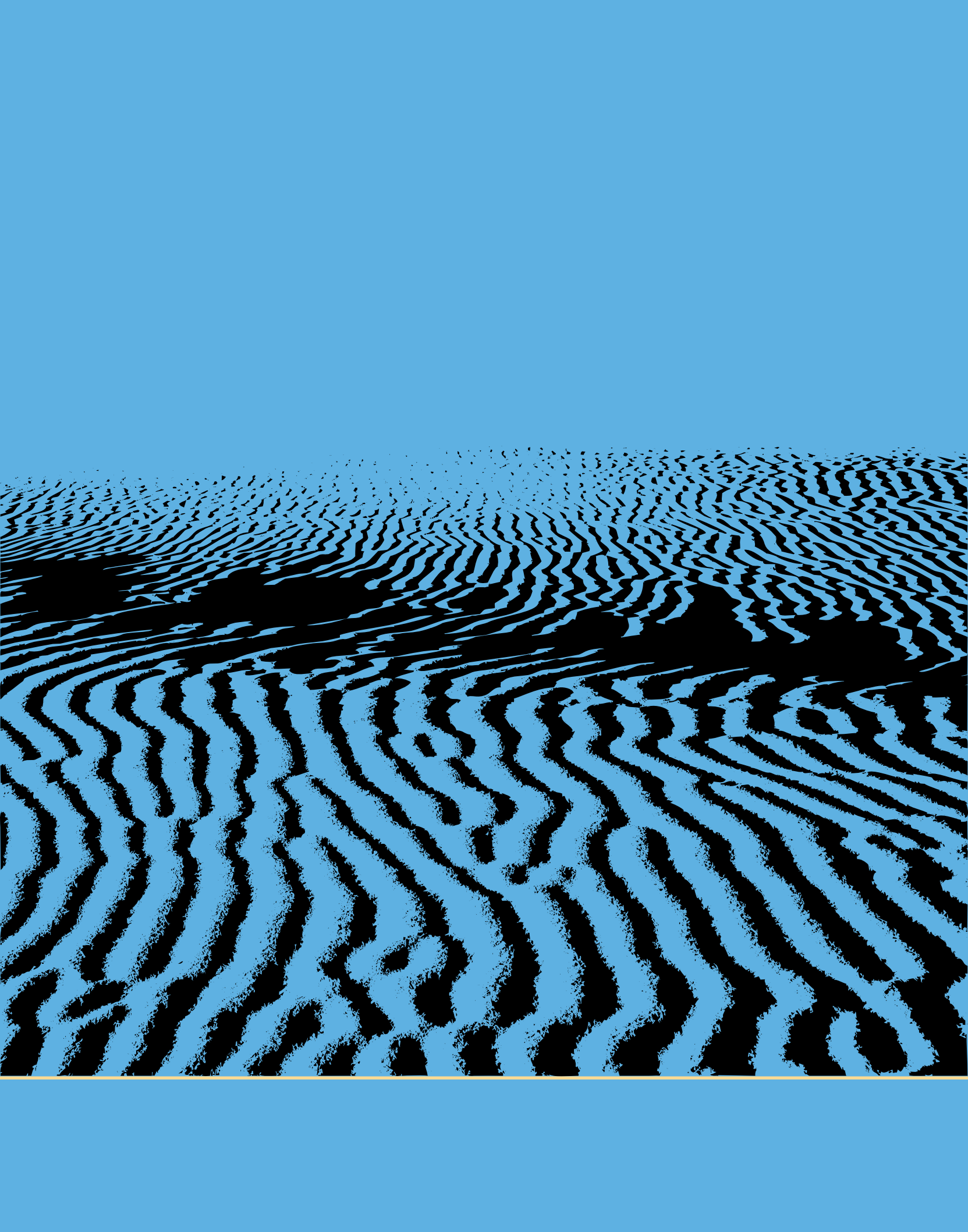
This project directly benefitted more than 2,900 people

and systems to shoulder these responsibilities.

The project aimed at building capacities of the Gram Panchayat staff in systematic local planning using the Water Use Master Plan (WUMP) approach. It also created community awareness on environmental sanitation and explained provisions under various government programmes and implementation of water and sanitation interventions in a transparent manner. Based on the plans prepared, the Gram Panchayat was also helped to implement some key activities pertaining to water and sanitation.

Outputs

1. All Gram Panchayat members understood the importance of water conservation and adoption of safe sanitation through the baseline and WUMP exercises.
2. Comprehensive ward-wise baseline information and WUMP report prepared and used by Gram Panchayat to prioritize interventions.
3. Several rounds of Community-Led Total Sanitation (CLTS) training & awareness campaigning has led to reduction in open defecation by 50% and change in hygiene behaviour.
4. Around Rs. 50 Lakhs mobilized from various schemes towards water & sanitation activities.
5. The Gram Panchayat opened a separate bank account for receiving project funds by seeking permission from the District Collector, for the first time in Odisha.



RAJASTHAN



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01

Project name

Fellowship programme on building and nurturing leadership in the water sector

Partners

Sambhaav Trust

Partners Profiles

Sambhaav works towards empowering rural communities to address common needs through forums while building pressure on government bodies to perform so that people access what is rightfully theirs.

<http://www.sambhavfoundation.org/>



Duration

January 2009 – December 2014
(72 months)

Budget (INR)

65 lakhs

Project location

The fellows were located across various states.

Reach

This project helped mentor over 100 Fellows

Project summary

Sambhaav helped develop leadership in the water sector by proactively looking out for inspired individuals spread across the country, identifying areas of work they are interested in and mentoring them. This fellowship helped build the leadership skills of the Fellows and, in some cases, provided a small grant for pilot projects on water management. It also helped build leadership among staff in partner organizations to create a second rung of leaders who will take the vision of the organization forward.

Outputs

1. Over a hundred Fellows who worked on water issues mentored.
2. Provided guidance to the Fellows' work on water –e.g. revival of traditional water bodies like Talaabs, Beris, Kuans and Kahdins.
3. Documentation efforts related to water conservation undertaken.
4. Orientations conducted for partner organizations to embed the process of leadership building.



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02

Project name

Community based integrated water and sanitation programme in rural Rajasthan

Partner

Seva Mandir

Partner Profile

Seva Mandir is a non-government organization working on rural and tribal development issues for over 40 years. The organization works in Udaipur and Rajsamand districts of South Rajasthan and takes up a range of rural development interventions on education, health, natural resources, women and childcare and community institutions.

www.sevamandir.org

Project summary

In rural areas of Udaipur and Rajsamand districts of Rajasthan, water scarcity is a widespread issue. The hilly terrain does not allow for the storage of rainwater, leading to top soil erosion and low recharge of groundwater. This project provided clean drinking water by developing protocols for water security. Seva Mandir created/revived drinking water systems and facilitated community based structures. They also promoted eco-sanitation. Rural youth and women were trained in hydrogeology and water resource management. This generated a perspective of groundwater as a common resource among communities.



Duration

November 2009 - March 2013 (40 months)

Budget (INR)

1.29 Crores

Project location

14 villages in Udaipur and Rajsamand districts of Rajasthan

Reach

This project directly benefitted more than 10,000 people and indirectly benefitted over 5,000 people

Outputs

1. Fourteen individual and 2 community rainwater harvesting units, 43 open well based water supply systems and 12 groundwater recharge structures constructed. 82 hand pumps and 480 household stand-alone filters also provided.
2. Groundwater management understood by facilitating hydrogeological assessments in the villages.
3. Rural youth trained as para-hydrogeologists with technical support from Arid Communities and Technologies, an organisation based in Gujarat.
4. Gram Vikas Samitis formed to act as pressure groups. They also handle the Gram Vikas Kosh (community fund) contributed by every household and other assets.
5. Community management systems evolved with responsibilities and tasks assigned to village members.
6. Community taken on exposure visits for building awareness.
7. More than 240 Eco-San toilets constructed in 11 villages on demand. Training on operation and sustainability provided for the same.
8. People came forward to contribute around Rs. 5,000 for toilets in their households, where the project gave around Rs. 13,000 each.



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Project name

Reviving traditional water harvesting structures & river revival in Rajasthan (Phase I and II)

Partner

Sambhaav

Partner profile

Sambhaav works towards empowering rural communities to address common needs through forums while building pressure on government bodies to

perform so that people access what is rightfully theirs.

<http://www.sambhavfoundation.org/>

Project summary

Scanty rainfall coupled with lack of groundwater leads to acute water scarcity in parts of Western Rajasthan. Anchored by village level institutions, Sambhaav has begun reviving traditional water harvesting systems which. One of the biggest successes of this project has been the development of community



03



Duration

Phase I: November 2006 – March 2008
(17 months)

Phase II: August 2008 – December 2012
(52 months)

Budget (INR)

43.5 Lakhs

Project Location

120 villages in Alwar, Barmer and
Jaisalmer districts of Rajasthan

Reach

This project directly benefitted more
than 2,600 people and indirectly
benefitted over 4,200 people

leaders and a sense of ownership over their assets and water management. The project has helped reduce distress migration and improved the quality of life of women, who previously used to spend several hours in a day travelling long distances for availing drinking water.

Outputs

1. A successful Information, Education, Communication (IEC) component ensured that the people were motivated to take ownership over ensuring water security in their villages.
2. The work was anchored by local village level institutions, who took complete responsibility for planning, implementation, review and maintenance of the various works taken up, as well as mobilizing community contributions and participation in the work.
3. Work on revival of traditional water harvesting systems such as *beris*, *tankas* and *khadeins* was done in 85 villages. The overall reach of the project was 120 villages.
4. The work helped reduce migration of people and drudgery in fetching water.



SIKKIM



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01

Project name

Provision of safe domestic water through sustainable development and management of water sources in rural areas of East and South Sikkim

Partner

The Mountain Institute of India (TMI)

Partner Profile

TMI is a secular, non-profit organization dedicated to protecting mountain ecosystems and mountain communities through advocacy, education, and outreach. Based in Washington, D.C.,

TMI has offices and runs programmes in the Andean, Himalayan, Appalachian and mountain ranges in the United States. In addition to working with local communities on environmental and cultural conservation issues, TMI works at a global level as well through its Mountain Forum, Sustainable Living Systems, and Sacred Mountains initiatives.

www.mountain.org

Project summary

In several rural areas of Sikkim, there is lack of access to safe domestic water to the local households. This is due to



Duration

February 2010 – January 2013 (36 months)

Budget (INR)

23.6 lakhs

Project location

3 Gram Panchayats in, East Sikkim; West Sikkim and, South Sikkim districts of Sikkim

Reach

This project directly benefitted around 500 people and indirectly benefitted around 900 people

lack of management of water sources in the area. To address this issue, this project created sanitation infrastructure in three target areas. Alongside this project, the Rural Management and Development Department of Sikkim (RMDD) built a better understanding and management of springs to ensure sustainable use. The work is now available at www.sikkimsprings.org. ACWADAM provided technical guidance to the RMDD for this work.

Outputs

1. Preliminary hydrogeology studies conducted at Tareythang.
2. Training provided in spring types, ground water, rock formation and hydrogeology.
3. Ward-wise micro-plans prepared with the active participation of the local water users, Panchayats, school teachers and elderly people.
4. Fifty water harvesting tanks installed.
5. Water User Groups strengthened and capacity built to understand the need for proper management of water resources. Employment provided to 52 local people via agroforestry development in the spring catchments.
6. Twenty-four families motivated to construct toilets.
7. Around Rs. 45,000 leveraged from the government to construct toilets.



TAMIL NADU



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01

Project name

Community management practices for ensuring sustainable domestic water (Phase I)

Partner

Gandhigram Trust

Partner Profile

A Gandhian Institution with several decades of experience in rural development, Gandhigram Trust works to provide access to affordable essential services to the rural community in health, education and social welfare. One of the main aims is to co-create knowledge with the communities and



Duration

November 2006 – July 2008 (21 months)

Budget (INR)

14 Lakhs

Project location

12 villages in Dindigul district of Tamil Nadu

Reach

The project has directly benefitted more than 7,800 people

leverage their traditional strengths, and make them applicable for modern times. The aim is to ultimately strengthen the community by facilitating economic development programmes, creating livelihood opportunities and self-managed development programmes
<http://www.gandhigram.org/>

Project summary

Poorly maintained infrastructure, lack of community participation and the inability to recover the maintenance fee from users were the main water supply system related problems identified by the Gandhigram Trust in the project villages. The project helped to restore

water supply infrastructure and simultaneously generated awareness about the importance of maintaining water supply installations and protecting the water from contamination. Capacity building for maintenance of water supply installations was undertaken by building the technical and managerial capacities of local people to ensure sustainability of the effort post the project period.

A tariff system was introduced to enable full recovery of the operation and maintenance cost and at least 25% of the capital investment and replacement cost from the water users.

Outputs

1. Village Water Committee formed for regulating water services at the village level.
2. Water User Groups representing users organized area wise.
3. Tariff system operationalised for achieving full recovery of Operation and Maintenance cost and at least 25% of the capital investment and replacement cost from the water users.
4. A simple monitoring system for pumping hours, power consumption, water quality, expenditures and revenue collection etc. introduced.



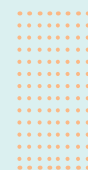
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5. Power pump operators and hand pump mechanics trained to repair and keep stock of minimum required tools and spares for maintenance repairs and emergency repairs.
6. Existing system of open wells, hand pumps, water pipelines and connections, that were earlier in a state of disuse, were repaired.
7. Over 10 hand pumps and more than 100 stand posts renovated to provide hygienic water collection points.
8. Area around the over head tanks was cleaned and fenced to keep it clean. The pump operators were trained to maintain the over head tanks by taking measures such as chlorination of water and regular cleaning of the tanks.

9. People were trained to keep and handle their drinking water at household level in a hygienic manner to avoid bacterial contamination. They also learned better hygiene practices such as keeping areas around the water collection points clean.
10. Soak pits were constructed and kitchen gardens cultivated to prevent water stagnation.
11. Over Rs. 60,000 was leveraged from the Panchayat for maintenance activities.



01



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Project name

Alliance for Water and Sanitation
Initiatives in Tamil Nadu

Partner

Gramalaya

Partner profile

Gramalaya has been working for more than two decades in Tamil Nadu with a focus on issues surrounding water and sanitation. It has worked with donors like WaterAid, Water.org and Arghyam to create a participatory, community model for urban and rural sanitation. Gramalaya has a dedicated training centre - NIWAS for Water & sanitation training. GUARDIAN, Gramalaya's MFI provides microfinance to Gramalaya's projects.



Duration

March 2012 – March 2015 (37 months)

Budget (INR)

Rs.1.66 Crore

Project location

60 Gram Panchayats in Namakkal, Pudukkottai and Perambalur districts of Tamil Nadu

Reach

This project directly benefitted more than 32,000 people

The organization has expanded into areas outside Tiruchirapalli and also works on providing credit for livelihood.

www.gramalaya.in

Project summary

The Census 2011 estimate that only a quarter of rural Tamil Nadu was covered with sanitation facilities was a wakeup call for Tamil Nadu. This project aimed to increase the access to sanitation in 3 districts of Tamil Nadu by implementing a network model. Thus, the project not only built toilets but also the capacities of NGOs to work in the water and sanitation sector. It adopted a holistic approach to sanitation by tackling not only demand generation but also

providing access to finances, ensuring that appropriate sanitation technologies are deployed and following up for usage. People were also facilitated in getting individual water connections wherever possible to mitigate any drudgery caused by collecting more water for household toilets. This project has helped establish that when motivated, people prefer to construct a toilet with bathroom and water storage facility. The project also helped provide lessons for Gramalaya's work as a Key Resource Centre of the Ministry of Drinking Water and Sanitation, Government of India.

Outputs

1. Gramalaya helped build capacities of 3 NGOs – LEAF Society in Namakkal, Annai Trust in Pudukkottai and INDO trust in Perambalur built on sanitation. These 3 NGOs are now resource centres for sanitation.
2. Gramalaya helped train the 3 NGOs through capacitybuilding workshops, orientation meetings and monthly monitoring visits to provide technical support. As a part of the project, an external evaluator was appointed to review the project every 6 months and sharing meetings were also organized between all 4 groups to understand successes and challenges from each other.



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3. The FNGOs in turn trained 60 Water and Sanitation Promoters at the Panchayat. These Water and Sanitation Promoters played a vital role in creating rapport with stakeholders – people, PRIs, women's SHGs, local officials and school authorities.
4. 27 villages were made Open Defecation Free through this project.
5. More than 7,400 families were motivated to construct household toilets. About 5,100 of them opted for toilets with bathrooms and only around 2,300 families opted for an individual household latrine alone.
6. The total cost for construction of these toilets was about Rs.17.69 Crores.

7. More than 1,600 families were facilitated in obtaining individual water connections.
8. The individual water connections cost more than Rs. 82 Lakhs. Eighty two percent of the families came forward and invested their own money others were assisted with loans from SHGs and GUARDIAN MFI.

9. Gramalaya was identified as a Key Resource Centre (KRC) by the Ministry of Drinking Water and Sanitation, Government of India. As a part of this, it conducted 2 training programmes on water and sanitation for government officials and NGOs.
10. Gramalaya also worked with the Tamil Nadu government's Rural Development Department and the District Rural Development Agency, Tiruchirappalli as a resource NGO to provide training to district level government officials.



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Project name

Implementation of the Integrated Water and Sanitation Programme in Dindigul District (Phase III)

Partner

Gandhigram Trust

Partner profile

A Gandhian Institution with several decades of experience in rural development, Gandhigram Trust works to provide access to affordable essential services to the rural community in health, education and social welfare. One of the main aims of Gandhigram is in co-creating knowledge with the communities and to leverage their traditional strengths, in order to make them relevant for current

situations. The aim is to strengthen the community by facilitating economic development programmes, creating livelihood opportunities and self-managed development programmes.

<http://www.gandhigram.org/>

Project summary

Gandhigram, previously, worked on rejuvenation of village water supply systems and sanitation awareness. The need to strengthen local institutions for sustainable provision of water and sanitation emerged as an important area of work. As a result, this project developed model villages on sustainable management of water and sanitation facilities at the local level. It improved hygiene practices, safe disposal of waste



Duration

November 2010 – October 2013
(36 months)

Budget (INR)

29 Lakhs

Project location

19 habitations in 5 Panchayats in
Dindigul district of Tamil Nadu

Reach

This project has directly benefitted
more than 12,000 people.

water and solid waste. Action research was also carried out on costs involved in water supply provision.

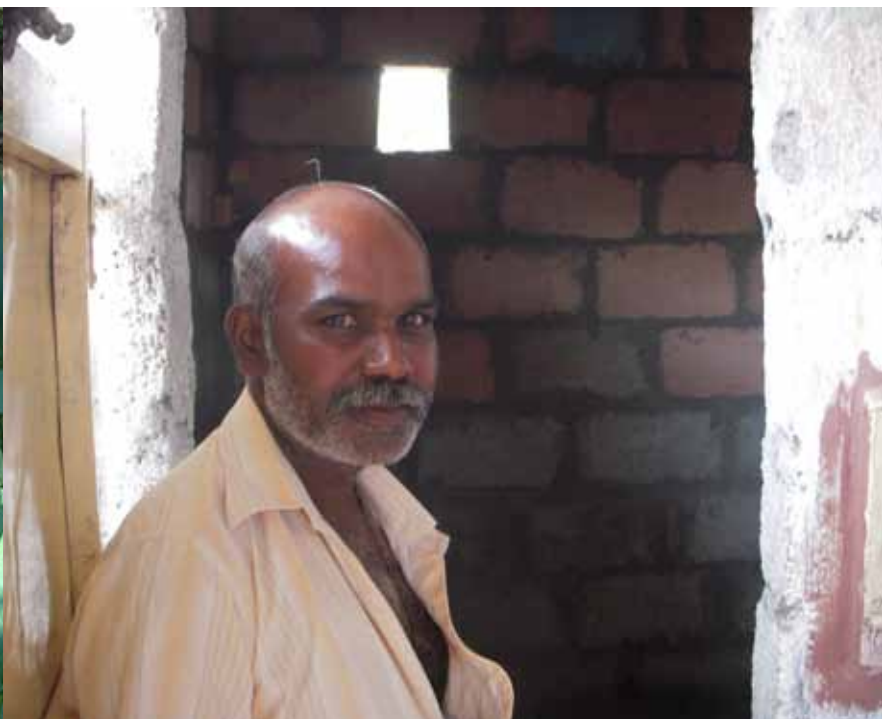
Outputs

1. A sample survey conducted to analyze the water supply and sanitation facilities.
2. Village Water and Sanitation Committees (VWSCs) reconstituted in 5 Gram Panchayats. They now handle issues related to water and sanitation services.
3. Source improvement was carried out for 4 borewells and 2 open wells by creating structures like check dams. 9 borewells were also newly constructed.
4. The practice of testing water for quality once in three months was established
5. Panchayat representatives and pump operators trained through workshops

and exposure visits on the importance of water conservation. Cost recovery for water to regulate demand and best practices in sanitation.

6. Households with individual water connection regularly pay for water supply.
7. Women's participation increased in local level decision making bodies.
8. School toilets and water supply systems have been revived in three schools, each of which cost Rs. 13,500.
9. 150 soak pits and 10 vermi compost structures were created to be used by the community.
10. A health committee was set up to ensure proper maintenance of toilets





and hygiene practices in the three schools.

11. More than 1000 families were motivated to construct single pit toilets. In order to ensure equity, the most vulnerable families were identified and provided grants to construct toilets. 40 families benefitted from this effort.
12. Sanitation structures and provision of water supply facilities have been rejuvenated inside the women sanitary complex.
13. Gray water management is being practiced using garden cultivation and soak pits, using 150 soak pits constructed by this project.
14. Training was provided for PRI members, SHGs and the community for the proper disposal of solid waste.
15. Around 26 lakhs was leveraged from the District Watershed Development Agency and Department of Agriculture Engineering for the construction of open well and borewell sources.
16. Around 16 lakhs was leveraged from TSC incentives and around 12 lakhs was contributed via loans by self help groups for toilet construction.
17. A Revolving Fund of Rs. 3 lakh provided by Arghyam was availed by 403 poor households as interest-free loan for building toilets



03



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Project name

Promoting sanitation among marginalized communities in Namakkal district

Partner

Leadership through Education and Action Foundation (LEAF) Society

Partner profile

LEAF Society primarily works in Namakkal district of Tamil Nadu with the objective of improving the socio-economic status of marginalized communities by promoting local leadership, inculcating the values of ownership, sharing and mutual cooperation.

<http://www.leafsociety.in/>



Duration

March 2010 – March 2012 (25 months)

Budget (INR.)

13 Lakhs

Project location

5 villages in Namakkal and Rasipuram districts of Tamil Nadu.

Reach

This project directly benefitted more than 430 people and indirectly benefitted over 2,100 people

Project summary

Namakkal district ranks 18th among the 30 districts in Tamil Nadu in the human development index. People in the project area had almost no access to safe sanitation and poor understanding of hygiene practices. Children were identified as important change agents and their hygiene practices were improved. This project sought to promote safe sanitation practices and create demand for household toilets by linking with credit as well as leveraging funds from Total Sanitation Campaign. Liquid waste management practices such as construction of soak pits and cultivation of kitchen gardens were also promoted. The kitchen gardens provided the added benefit of improving nutrition security.

Outputs

1. Awareness was raised among communities on the importance of safe water, sanitation and hygiene practices through workshops and exposure visits.
2. Innovative IEC material on sanitation were produced.
3. Joyful learning centers that educated children on better hygiene practices were set up.
4. Training was given to community and local government on waste management, village level sanitation and hygiene.
5. Community Based Organisations (CBOs) were created and sustained. These CBOs constructed toilets with their own savings.
6. Around 30 families were motivated to construct bathroom cum toilets through money leveraged from village level Women's Water and Sanitation Societyies (around Rs. 1 Lakh).
7. Soak pits were constructed and kitchen gardens promoted to manage wastewater.
8. Household water connections were installed.



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Project name

Facilitating the panchayats and the community in achieving complete village sanitation (Phase II)

Partner

Gandhigram Trust

Partner profile

A Gandhian Institution with several decades of experience in rural development, Gandhigram Trust works to provide access to affordable essential services to the rural community in health, education and social welfare. One of the main aims of Gandhigram is in co-creating knowledge with the communities and to leverage their traditional strengths, in order to make them relevant for current

situations. The aim is to strengthen the community by facilitating economic development programmes, creating livelihood opportunities and self-managed development programmes.

<http://www.gandhigram.org/>

Project summary

After its efforts towards ensuring community management practices on a sustainable basis to provide domestic water to the communities in four Panchayats, Gandhigram identified five villages where sanitation coverage was poor and addressed these through:

1. Increasing awareness of people on importance of safe sanitation and hygiene practices.



Duration

August 2008 – October 2010 (27 months)

Budget (INR)

13 Lakhs

Project location

12 villages in Dindigul district of Tamil Nadu

Reach

This project directly benefitted more than 9,600 people and indirectly benefitted over 5,300 people

2. Training and orienting the Gram Panchayat to provide improved services to the community.
3. Providing a menu of sanitation options to people so that they could choose from depending on their affordability.
4. Linking them with a revolving fund that provided interest free loans and the government scheme that provided incentive for toilet construction.

Outputs

1. Awareness building workshops, exposure visits and IEC activities were conducted to create awareness about the importance of sanitation and hygiene.
2. Training was given to the community and gram panchayat members to facilitate better village level sanitation planning.
3. Over 170 Self Help Groups (SHGs) were formed to distribute loans for construction of latrines.
4. More than 580 families were motivated to construct single pit toilets.
5. Waste management was promoted by constructing more than 60 soak pits.

6. Rs. 7 Lakhs leveraged from the Total Sanitation Campaign, Government of India's flagship scheme for sanitation.
7. Rs. 3 Lakhs was provided by Arghyam as an interest free revolving fund to speed up toilet construction, as families received subsidies from the government only after construction of the toilet.



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Project name

Sustainable WASH initiatives through PRIs & women 's federations.

Partner

Gramalaya

Partner profile

Gramalaya has been working for more than two decades in Tamil Nadu with a focus on issues surrounding water and sanitation. It has worked with donors like WaterAid, Water.org and Arghyam to create a participatory, community model for urban and rural sanitation. Has a dedicated training centre - NIWAS for Water & sanitation training. GUARDIAN, Gramalaya's MFI provides microfinance to Gramalaya's projects. The organization plans to expand into



areas outside Tiruchirapalli and also work on livelihood issues.

<http://www.gramalaya.in>

Project summary

This project focused on increasing sanitation coverage and improving water supply and management on a large scale in Tiruchirapalli district, Tamil Nadu. Community based organisations were central to the effort. The project focused on strengthening existing water supply systems, hygiene education, safeguarding water and sanitation infrastructure, promoting awareness on water conservation, etc. At the end of the project 44% of Panchayats were declared Open Defecation Free. The involvement of PRI, women's federation

and the community helped increase sustainability of WatSan activities. Rainwater harvesting was successfully promoted during the project period and vermicomposting was introduced as a way to manage solid waste.

Duration

November 2006 – April 2008 (18 months)

Budget (INR)

23 Lakhs

Project location

215 villages in Tiruchirapalli district of Tamil Nadu

Reach

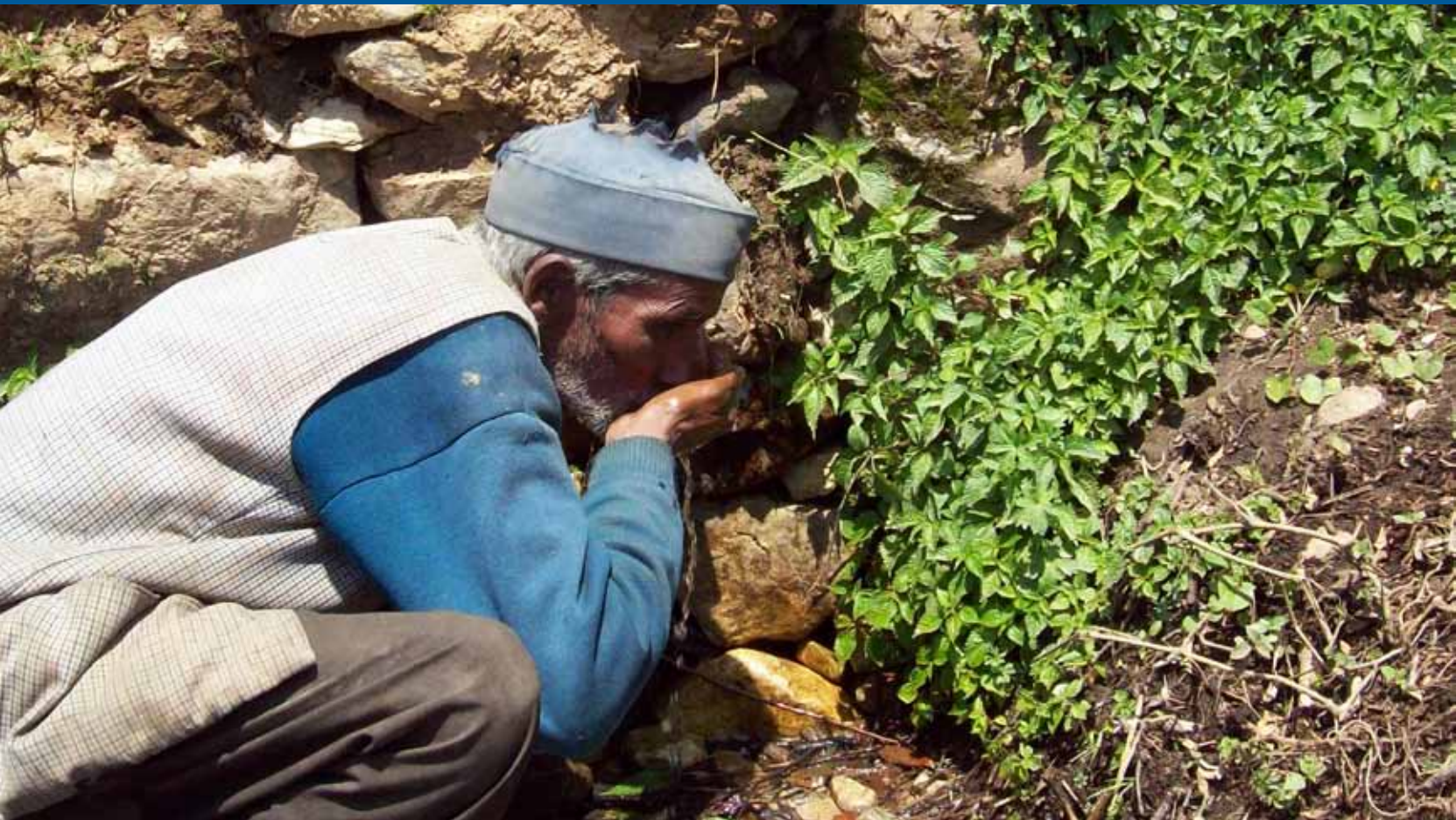
This project indirectly benefitted over 63,700 people

Outputs

1. Awareness building workshops, training and exposure visits conducted to promote good hygiene practices and rainwater harvesting.
2. Twenty-two Gram Panchayats and 2 town panchayats declared Open Defecation Free.
3. Over 7,200 families were motivated to construct household toilets in around 150 villages leveraging over 300 Lakhs from credit, TSC scheme and household's own contributions.
4. Over 25 rainwater harvesting structures installed in Community buildings.
5. Vermi composting promoted as waste management strategy.



UTTARAKHAND



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01

Project name

Addressing the water quality and quantity issues in the Himalayan region (Phase I)

Partner

Himalaya Seva Sangh (HSS)

Partner profile

HSS is a Gandhian organization that works with the objectives of promoting community action for social and economic development in the Himalayan region. It seeks to guide, coordinate and promote the activities of voluntary organisations and individual social workers for the socio-economic upliftment of the people of that region.

<http://himalayanwater.org>

Project summary

The Himalayan region receives high rainfall. However, most of it is concentrated in the monsoon season leaving local communities struggling for access to potable water during other times of the year. This meant that the women, who were primarily responsible for fetching water, travelled long distances braving the mountainous terrain for this. Arghyam supported HSS to institutionalize community based water supply systems to ensure perennial water availability.

The project had five key components:

- ▶ Ensuring adequate water supply round the year and safe drinking water to the people.
- ▶ Building the capability of the community to manage their drinking water system.



Duration

March 2007 – February 2009 (24 months)

Budget (INR)

10 Lakhs

Project location

17 villages in 2 districts (Tehri Garhwal & Uttarkashi) districts of Uttarakhand

Reach

The project directly benefitted more than 4,300 people and indirectly benefitted more than 12,000 people

- ▶ Awareness on hygiene practices leading to better health and hygiene among the households.
- ▶ Work on groundwater recharge, spring rejuvenation and soil erosion control.
- ▶ Creating a network of partners who were facilitated to work in their respective regions to ensure water security and improving hygiene practices.

The project worked with communities and ensured improved access to water.

Outputs

1. Several mobile workshops, Padyatras and work camps were undertaken on larger water issues such as river protection. This brought solidarity among the workers, sensitisation of community and brought the issue into limelight.
2. Three citizen reports on water issues published and one state level workshop at Delhi organised towards Govt. advocacy and to voice various campaign leader's work.
3. A successful IEC component ensured that the people came forward to contribute over Rs. 70,000 towards the project activities.
4. Construction of cost effective,

traditional water harvesting structures—around 145 *chaals* helped recharge springs downstream.

5. Microbe free, safe water in four villages through around four, community-level slow sand filters, installed near the springs and connected to the existing piped water supply scheme.



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02

Project name

Addressing water quality and quantity issues in the Himalayan region (Phase II)

Partner

Himalaya Seva Sangh (HSS)

Partner profile

HSS, a Gandhian organization works with the objectives of promoting community action for social and economic development in the Himalayan region. It seeks to guide, coordinate and promote the activities of voluntary organisations and individual social workers for the socio-economic upliftment of the people of that region.

<http://himalayanwater.org/>

Project summary

In the Himalayan region, acute water shortage exists due to high population and escalating commercial activities. Even in the river valley, enough potable water is not available, due to increased concentration of silt and mud load.

To solve this, Arghyam supported HSS from 2007 to 2009 to rejuvenate traditional water sources in the region. In the second phase, HSS continued to work on ensuring the provision of safe drinking water close to the village. HSS also worked on source sustainability for perennial availability of water. Measures such as revival and construction of *chaals*, promotion of broad leaved



Duration

July 2009 – June 2012 (36 months)

Budget (INR)

32 Lakhs

Project location

17 villages in 2 districts (Tehri Garhwal & Uttarkashi) districts of Uttarakhand

Reach

This project directly benefitted more than 4,300 people and indirectly benefitted over 12,000 people

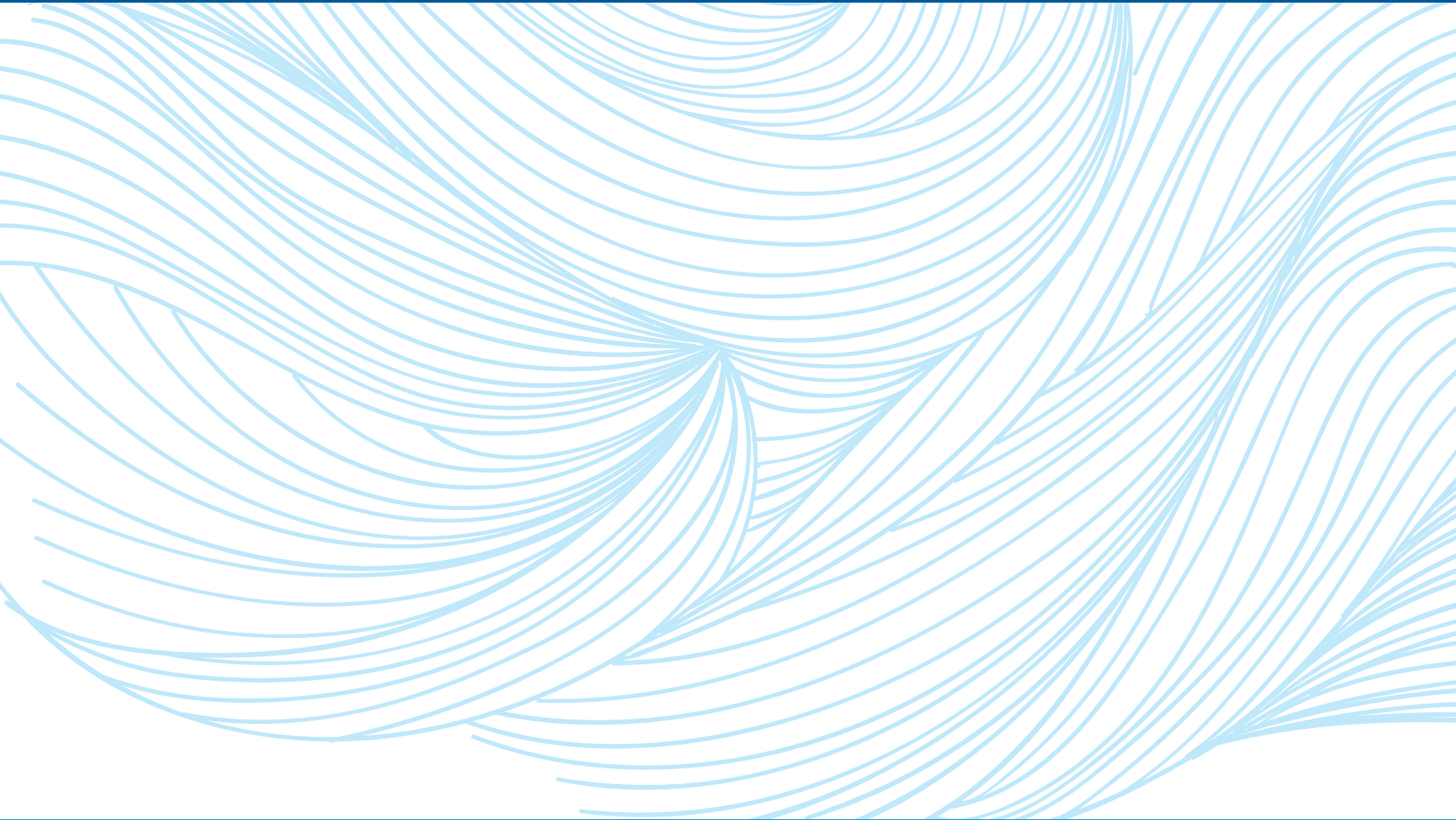
species of plants were carried out for this. Safe drinking water was assured by the introduction of slow sand filters. HSS also promoted eco-sanitation as a sustainable sanitation option. The community was involved at every step from source selection to maintenance to ensure ownership.

Outputs

1. A document based on the field study of the current Status of Traditional Wisdom of *Naulas*/ springs In Rural Areas of Kumaon and Garhwal was published.
2. Hydro-geological study of Henwal and Been River Valley conducted.
3. Construction and renovation of cost effective, traditional water harvesting structures: Over 381 *Chaals*, 53 *Naulas* and several *Chashmas* were constructed to improve the water availability in springs.
4. 11 slow sand filters were set up for water purification.
5. Broad leaved species of trees were promoted for reducing run off and improving water percolation, with over 65,000 saplings planted.
6. Community members (including the *Mahila Mangal Dals*. participated in construction of structures and sowing of seeds/ planting of seedlings as *Shramadan* (voluntary service). Nurseries of forest species were also raised by the community.
7. Eco-San structures constructed as demonstration units and training was provided for usage.



UTTAR
PRADESH



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01

Project name

Sankhiya

Partner

Inner Voice Foundation (IVF)

Partner Profile

IVF is a global civil society coalition campaigning to end the water and sanitation crisis. It works extensively on water quality issues, especially in Arsenic-affected regions to ensure that communities gain access to safe drinking water.

www.innervoicefoundation.in

Uttar Pradesh + Bihar

Duration

November 2011 – October 2013

Budget (INR)

39.87 Lakhs

Project location

10 villages in Bhojpur and Ballia districts of Bihar and Uttar Pradesh

Reach

This project indirectly benefitted more than 58,000 people

Project summary

Groundwater in several areas of Bihar and Uttar Pradesh is contaminated by Arsenic. Since it is the primary source of drinking water, this leads to severe cases of Arsenic poisoning. This project helped improve water supply and facilitated community empowerment by awareness generation and capacity building.

Contaminated water sources were monitored regularly using field testing kits. The project also opened up dialogue with government agencies on the issue of Arsenic contamination.

Outputs

1. A baseline survey conducted in the project villages to understand the extent of Arsenic contamination and its effects on the health and livelihoods.
2. More than 40 dugwells revived in 4 villages for providing Arsenic-free water.
3. A series of meetings with community, GP representatives, schools, doctors, conducted to inform them about arsenic issues.
4. Health camps conducted in several villages in collaboration with Health Department.
5. Several advocacy meetings held with State Water and Sanitation Mission

- and senior Government officials for providing Arsenic-free water to people and for reviving dug wells.
6. Awareness generation posters, pamphlets, handbills, and wall paintings on the harmful effects of Arsenic and its mitigation methods prepared and disseminated.
7. Testing of water samples using field-testing kits done in all the 10 villages, data tabulated and shared with Government officials.
8. Inner Voice Foundation staff were trained at Jadhavpur University on Arsenic contamination issues.



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02

Project name

Water for all and always – Holistic water management project in Bundelkhand Region

Partner

Development Alternatives (DA)

Partner profile

DA envisions a world where every citizen can live a secure, healthy and fulfilling life, in harmony with nature. DA works with a mission of creating sustainable livelihoods. The main focus areas are employment generation, skill development, a clean environment and fulfilling basic needs.

<http://www.devalt.org/>

Uttar Pradesh + Madhya Pradesh



Duration

July 2006 – May 2011 (59 months)

Budget (INR)

2.42 Crores

Project location

11 villages in Tikamgarh and Jhansi districts of Madhya Pradesh and Uttar Pradesh

Reach

This project directly benefitted more than 8,500 people and indirectly benefitted over 800 people

Project summary

Residents of the Bundelkhand region experience acute scarcity. The project demonstrated a successful model for drinking water supply. This included management of demand and supply, development and strengthening of institutions that take decisions related to water management, and management of sanitation at the personal, household and village level. Conjunctive use of water resources was implemented through groundwater based piped water supply, hand pumps, rooftop rainwater harvesting and revival of dug wells. With closer access to water, drudgery was reduced for women and village

level conflicts also reduced. The project resulted in adequate, reliable and safe water being made available to 95% of households in the project area. The project led to more demand from the local government and communities for implementation of similar programmes in nearby villages.

Outputs

1. Baseline studies, training programmes for staff, exposure visits and awareness building workshops and other IEC activities were conducted.
2. Community level water structures constructed and revived:
 - 1 community rainwater harvesting structure built.
 - 1 school rainwater harvesting structure built.
 - 14 traditional rainwater harvesting structures revived.
 - More than 10 open wells constructed.
 - More than 5 bore wells constructed.

घर बाहर सब स्वच्छ बनायें
हटा गंदगी रोग भगायें

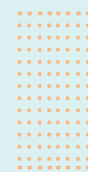
 Development
Alternatives

Arghyam
Safe Sustainable Water for all





- Around 30 hand pumps installed.
 - Over a 100 public stand posts constructed.
 - More than five community filters were installed.
 - Around 9 mini water supply systems were constructed.
3. A number of household hardware interventions were put in place:
- Over 100 household water connections.
 - Over 20 household filters installed.
 - Over 70 rooftop rainwater harvesting structures built.
4. Water quality testing was done to check for bacteriological contamination.
5. Source sustainability was an important part of the project.
- Around 45 groundwater recharge structures were established.
 - More than 5 farm ponds were built.
6. Nine Water User Groups (WUGs) were formed.
7. In order to close the loop on water, sanitation issues were also addressed:
- Over 690 families were motivated to construct double pit toilets.
 - 2 families were motivated to construct Eco-San toilets.
 - More than 80 families were motivated to construct soak pits.
8. A total of Rs. 2.2 Crores was leveraged for the project, of which around Rs. 50 Lakhs was contributed by the community and the rest was leveraged from various government schemes, such as Total Sanitation Campaign and Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS).



02



WEST
BENGAL



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Project name

Arsenic mitigation, sanitation and hygiene promotion in schools

Partner

Water for People

Partner profile

Water For People helps people in developing countries improve quality of life by supporting the development of locally sustainable drinking water resources, sanitation facilities, and hygiene education programmes. Water For People envisions a world where all people have access to safe drinking

water and sanitation and where no one suffers or dies from a water or sanitation-related diseases.

<http://www.waterforpeople.org/>

Project summary

Presence of arsenic above permissible limits in groundwater and lack of sanitation infrastructure in schools took a toll on the health of school children in the 24 North Paraganas district. This project helped improve the water and sanitation in 12 schools in this district. Well designed sanitation facilities for adolescent girls and women teachers were provided

01



Duration

May 2009 – April 2011 (24 months)

Budget (INR)

20 Lakhs

Project location

12 schools in North 24 Parganas district of West Bengal

Reach

The project directly benefitted more than 14,000 students in 12 schools


and significant emphasis was given on improving menstrual hygiene. These interventions helped reduce student dropout rates and increase attendance, especially among girls.

At the end of the project, there was a prioritization of issues by school committees, who also committed funds for the programme's ongoing operation and maintenance.

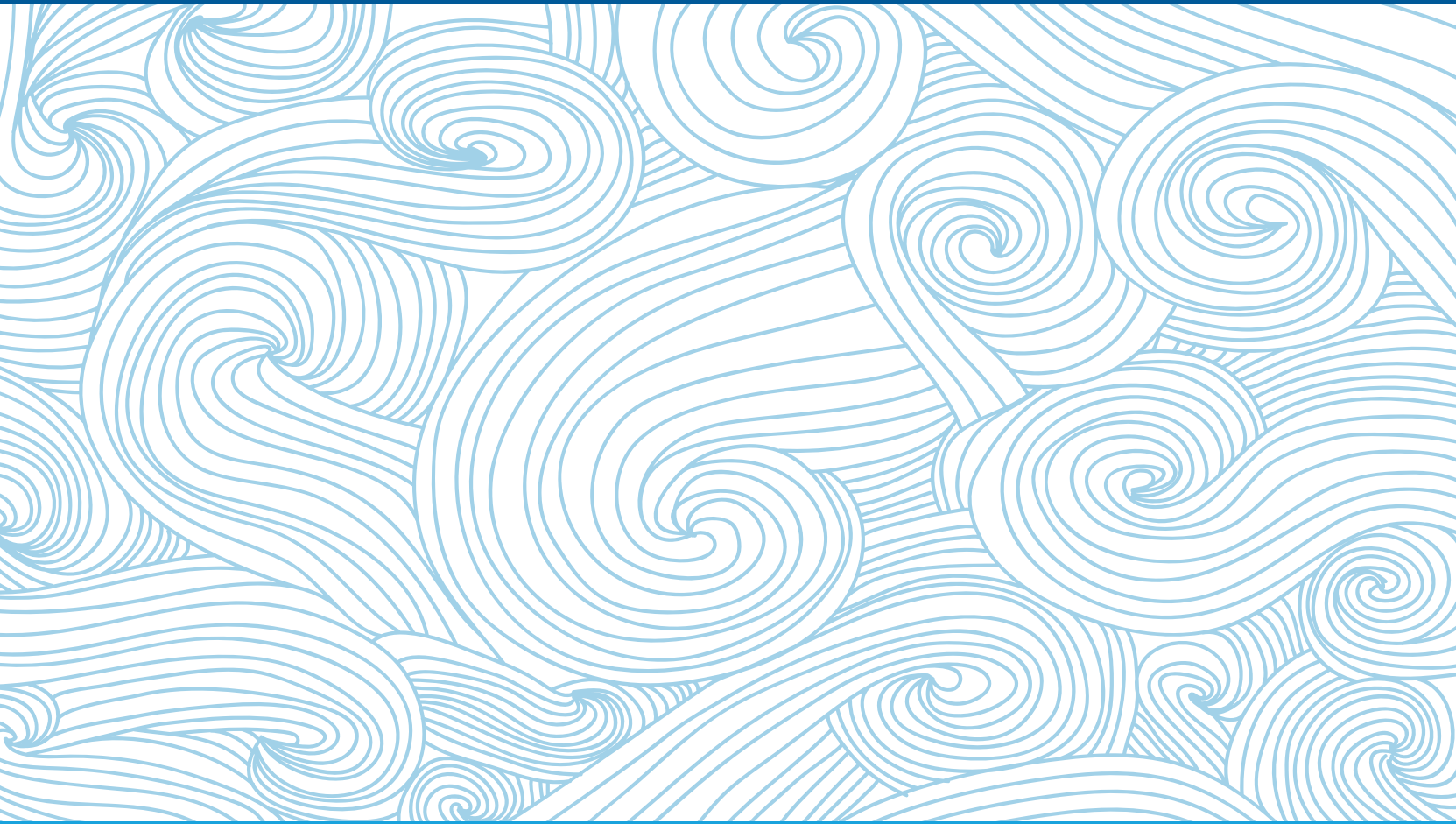
Outputs

1. Knowledge-Attitude-Behaviour-Practice studies conducted in all 12 schools to gauge the awareness and behaviour of the students. Based on the study, a participatory planning exercise for designing customized interventions was formulated.
2. A School Water and Sanitation committee (WatSan) and a revolving school fund developed to help build ownership and provide effective maintenance and management of the assets.
3. Water quality testing to check arsenic levels carried out.
4. Drinking water:
 - AMAL filters for Arsenic removal installed in 6 schools where arsenic levels were above permissible limits.

- Drinking water stations constructed in all 12 schools.
5. Sanitation:
 - Sanitation blocks constructed in all 12 schools.
 - Girls' toilets redesigned with focus on menstrual hygiene management.
6. Anwasha clinics were linked to all schools. Anwasha is a flagship programme of Ministry of Health and Family Welfare, Government of India that addresses the health issues of adolescent girls, specifically related to menstrual hygiene.



ACROSS INDIA



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01

Project name

Pilot AWIS diagnostic tool developed by the Water Integrity Network (WIN) to Assess Integrity and Governance of WASH interventions in Schools: A Learning-Sharing Initiative

Partner

Freshwater Action Network South Asia (FANSA)

Partner Profile

Modern Architects for Rural India (MARI) is the host of the Freshwater Action Network South Asia (FANSA) in India. MARI is a non-profit, professional development organization engaged in grassroots innovation as well as influencing policies

Duration

March 2013 – February 2014
(12 months)

Budget (INR)

9.9 Lakhs

Project location

Warangal, Kurnool and Viskhapatnam districts of Andhra Pradesh

Reach

This project has benefitted around 30,000 people

and programs towards inclusive and accountable governance in WASH sector. <http://www.freshwateraction.net/>

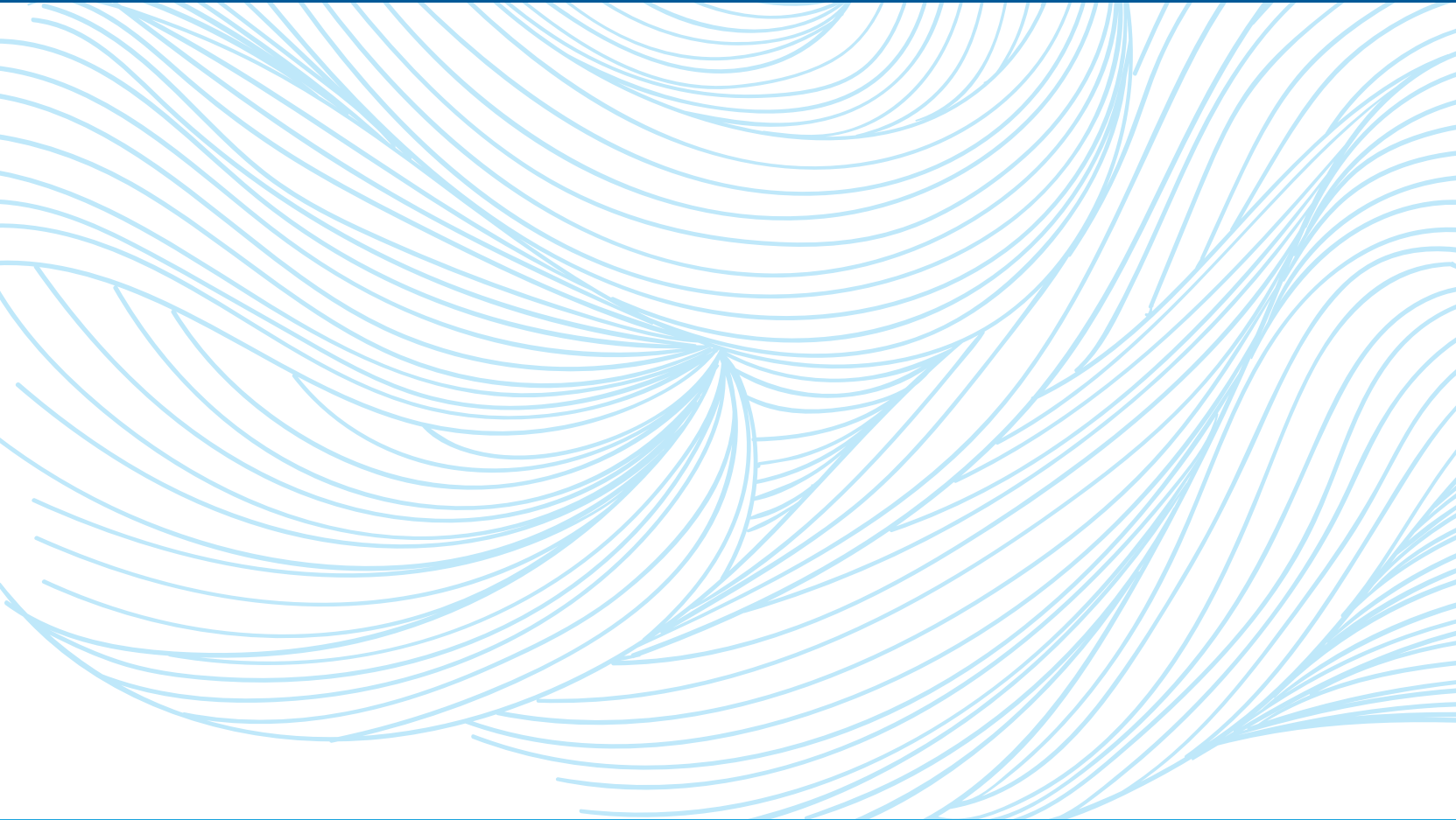
Project summary

A crucial challenge that the water sector faces is that the progress of service coverage is not commensurate with the increased flow of investments and spending. Improving the integrity is, thus, an urgent need to speed up and sustain the progress of WASH coverage. But, yet there seemed to be a dearth of competence and focused efforts by CSOs to address this effort. To promote learning that enhance integrity

in the WASH sector, FANSA built the capacities of Civil Society Organizations (CSOs). Locally relevant tools of integrity assessment were developed and used. The Annotated Water Integrity Scan (AWIS) a diagnostic assessment tool by the Water Integrity Network (WIN) was used to review the integrity of School WASH in AP. Priority areas of action to reduce corruption were identified and details of the tools are available at <http://www.waterintegritynetwork.net/>

Outputs

1. Focus raised on integrity issues in WASH sector and in the sub sector of WASH in schools.
2. The capacities of the organizations involved increased, in the matters of integrity diagnosis and action.
3. Improvement in the schools' water, sanitation and hygiene situation, as well as in the operational mandal.
4. Dialogue generated at district and state level on the importance of water and sanitation awareness
5. Around 3.5 lakhs contributed by other financing sources towards strengthening the WASH sector.



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02

Project name

A Small Grants Management Programme using Peer Water Exchange

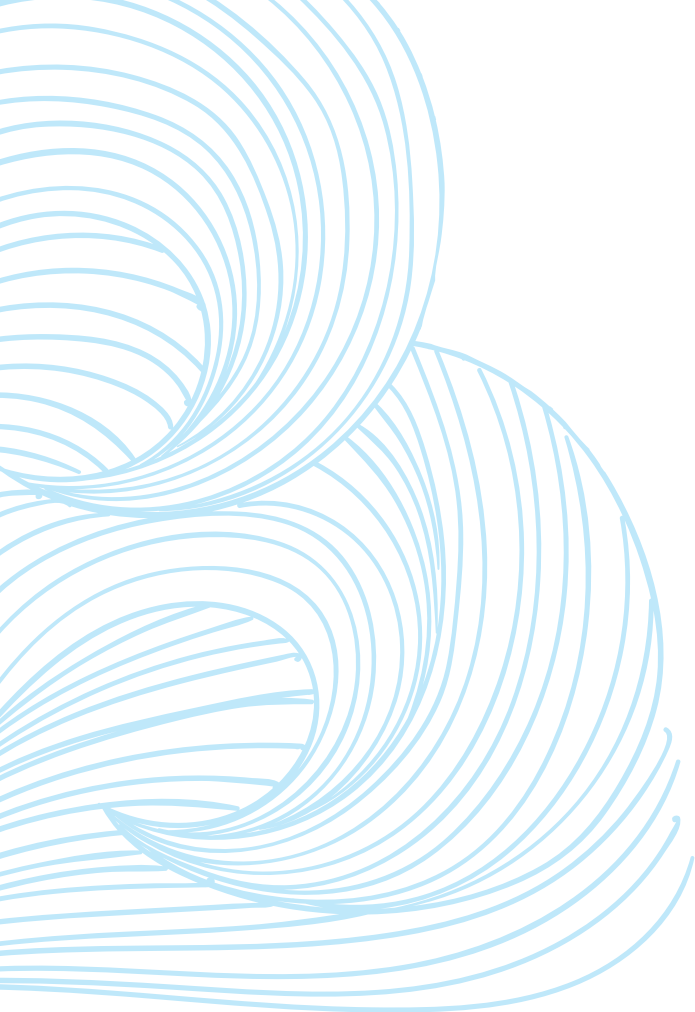
Partner

Peer Water Exchange (PWX)

Partner Profile

PWX is a platform, process and human network for funding, soliciting, selecting, managing, and evaluating water projects worldwide. It is a participatory decision-making system to oversee thousands of grassroots water and sanitation projects worldwide efficiently, effectively, and transparently.

www.peerwater.org



Duration

February 2012 – December 2012
(11 months)

Budget (INR)

25 Lakhs

Project locations

1 Village in Villupuram district
of Tamil Nadu
10 villages in Nadia district
of West Bengal
4 villages in Jodhpur district of Rajasthan
2 villages in Shohratgarh district
of Uttar Pradesh
4 villages in Malur district of Karnataka

Budget (INR)

This project directly benefitted more
than 3,000 people

Project summary

Arghyam wanted to reach out to small groups doing significant work in water and sanitation. To do this it collaborated with the PWX to create a Small Grants Programme. This Programme supported NGOs helping marginalized communities address issues in domestic water and sanitation. The PWX platform selected organizations and guided implementation. It also enabled third party field visits and helped look into capacity building requirements.

Outputs

1. Identification of NGOs in Tamil Nadu, West Bengal, Rajasthan, Uttar Pradesh and Karnataka.
2. 250 people motivated to construct Eco-San toilets in Tamil Nadu by Palmyra.
3. Ten dugwells constructed to provide Arsenic free drinking water in West Bengal by Project Well.
4. Renovation of ancient beries and construction of new tankas in Rajasthan by Gravis.
5. Construction of 10 Eco-San toilets and rainwater harvesting tanks in Uttar Pradesh by SES.
6. Implementation of toilets and rainwater harvesting systems in 3 Aangawadis in Karnataka by AA foundation.



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03

Project name

Water Law Reforms – dissemination and capacity building of drinking water and sanitation (Further understanding of ongoing reforms and capacity building)

Partner

Environmental Law Research Society (ELRS)

Partner Profile

ELRS aims to contribute to the establishment and implementation of legal and institutional frameworks that foster the sustainable conservation and use of the environment and natural resources in an equitable, international context.

www.elrs.in

Duration

September 2009 – February 2013
(42 months)

Budget (INR)

52 Lakhs

Project location

All India

Reach

This project was useful to policy makers, academicians, legal professionals, students and practitioners working in the environment and development sector, as well as village panchayats and NGOs

Project summary

Lack of awareness about water sector reforms is a gap among implementation organisations in the water and sanitation sector. A critical reason for this was the unavailability of information from a single source. To rectify this, ELRS gathered all necessary information in one place and compiled it in an easily understandable manner. ELRS also published material and conducted workshops around water law reforms and analysed how these reforms can reflect the goals and needs of targeted people.

Outputs

1. Workshops focusing on state level reforms for civil society groups, self help groups etc. in Uttar Pradesh, Rajasthan and Karnataka.
2. A primer on law and policy framework related to water and sanitation was (including Hindi and Kannada versions) produced.
3. Indian water law and policy instruments compiled and published in the form of a book.
4. Papers on key issues in water and sanitation published.
5. Research findings simplified and shared through flyers and brochures.
6. A national dissemination workshop conducted.



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Project name

Moving from understanding water conflicts to resolving conflicts

Partner

Society for Promoting Participative Ecosystem Management (SOPPECOM)

Partner Profile

The Forum for Policy Dialogue on Water Conflicts in India (Forum) is an effort to bring together all those interested in working on issues related to water conflicts in India into a loose network for action and interaction. It recognises that water is a common pool resource, and

that the brunt of water conflicts is borne by those who fall on the vulnerable side of gender, class, caste, ethnic and other divides.

The Forum is anchored by SOPPECOM, a non-profit, non-government organisation work in the area of Natural Resource Management (NRM) primarily in rural areas. It is committed to the principles of sustainable and rational use of natural resources, equity and social justice in the distribution of benefits especially to the disadvantaged sections.

<http://waterconflictforum.org>
www.soppecom.org

04



Duration

May 2008- March 2012
(46 months)

Budget (INR)

99 Lakhs

Project location

All India with a focus on Kerala and Odisha

Reach

Several marginalized water users, civil society organizations, official institutions, journals, water tribunals, activists and the government found this program useful

Project summary

Water conflicts in India have now percolated to every level. They are aggravated by the paucity of frameworks, policies and mechanisms to resolve and prevent conflicts. The Forum documented conflicts across the country. It also created frameworks for understanding conflicts better. Two state resource centres were set up in Kerala and Odisha. Lessons from the work were also advocated to Government of India.

Outputs

1. Two state resource centres were set up in the two states of Kerala and Odisha.
2. Three compendiums on water conflicts published – Water conflicts in Odisha; A compendium of case studies on flood induced conflicts and North East water conflicts.
3. The Kerala Centre took up the issue of the upstream-downstream conflict on the Chalakudy River due to the reservoir operation in the upstream. For the first time concerns around ecological flows during summer months was addressed by the State in response to this work.
4. The Odisha Centre took up action

research on conflict resolution issues around the Hirakud Dam. The primary conflict was between use of water for agriculture vs. industry.

5. The Forum intervened in the Mullaiperiyar inter-state conflict between Tamil Nadu and Kerala and organised meetings that attempted to bring together both sides to look for a middle path solution.
6. Two reports were published on Allocations and Entitlements and Legal and Institutional framework for water.
7. Three training programmes organised to build capacities on understanding frameworks around water conflicts and their resolution.

05

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Project name

State of Sanitation

Partner

Accountability Initiative
Gramener

Partner profile

Accountability Initiative

Accountability Initiative seeks to improve the quality of India's public services by promoting informed and accountable governance. It aims to provide regular, accessible, and relevant analysis of the implementation of government programs, develop people friendly tools to monitor service delivery and inform the public debate on how to improve the provision of public services.

<http://www.accountabilityindia.in/>

Gramener

Gramener is a data visualization product and service company that processes terabyte-scale data via non-traditional analytics in real-time and then shares these insights through intuitive and actionable visualizations.

<http://gramener.com/>

Project summary

Open defecation in rural India remains a problem that perplexes policy makers and civil society alike. India has the largest number of people who practice open defecation (626 million) and the most number of child deaths due to poor water, sanitation and hygiene conditions compared to the rest of the world.

Duration

October 2012 – May 2014 (19 months)

Budget (INR)

32 Lakhs

Project location

All India

While access to toilets is by itself an important aspect that needs to be understood, it is not enough to reach the goal of total sanitation. Indeed, India's rural sanitation scheme acknowledges this when it sets as its goal not only universal toilet coverage by 2019 but also improving health and provision of privacy and dignity to women with the overall goal of improving the quality of life of people living in rural areas.

Multiple agencies have assessed the status of the rural sanitation programme and have quantified its benefits over time. There have however, been very few attempts to provide an online, concurrent monitoring mechanism for government to track the status of both the implementation of the scheme and

the larger benefits from the scheme. The State of Sanitation (SoS) project was run by Arghyam with the goal to help provide a monitoring tool for the sanitation program.

Outputs

1. Designed monitoring tools that included:
 - Data visualisation tools available online that helped demystify government data and provide overlays between multiple data sets that are relevant to sanitation.
 - Assessment tools that attempted to qualify how the scheme is working and issues in implementation, usage and achievement of the rural sanitation scheme's goals by comparing the sanitation data set to other data sets like the Census 2011.
2. Identified best practices and gaps in implementation in data management.
3. These lessons were shared with the Ministry of Drinking Water and Sanitation and helped influence them to use visualisations for better monitoring.



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Urban Water & Sanitation

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Across India	239



KARNATAKA



01

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Project name

Application of urine and closing the nutrient loop by using humanure

Partner

University of Agricultural Sciences, (UAS) Bangalore

Partners profiles

The University of Agricultural Science, Bangalore, is a premier college for teaching, research and extension programmes in agriculture that serves people in the state of Karnataka and the country. It is, an autonomous educational and R&D institution with a number of Agricultural Research Stations and Colleges under its control, has responsibility to undertake research in Agricultural and Allied Sciences, extension of such sciences to assist the farming community of the state and imparting education and training.

The University offers undergraduate degree programmes in the faculty of Agriculture, and Master's degree programmes in 45 specialized areas in the faculty of Agriculture and Animal Sciences. Doctoral degrees are also offered in 34 specialized areas in the faculty of Agriculture and Animal Sciences.

<http://www.uasbangalore.edu.in>

Project summary

Based on pioneering research done by the University of Agricultural Sciences, (UAS) Bangalore, it was established that human urine can be productively utilised in agriculture and can produce on par yields with chemical fertilizers. Resource substitution of the petroleum based and energy and water intensive artificial fertilizers is possible. With a view to continue these studies and to understand the long term impact of the application of human urine on

Duration

March 2013 – February 2015

Budget (INR)

23.1 Lakhs

Project location

UAS, GKVK Campus Bangalore,
H.D. Kote and Kamasamudram

Reach

This project directly benefitted
100 marginal farmers

UAS, GKVK Campus Bangalore
H.D. Kote
Kamasamudram

soil and crops, the recovery of nutrients from human waste streams, Arghyam supported this research for the institutionalization of urine application research and research on closing of nutrient loop using humanure. The key objectives were:

1. The continuation of the research work on human urine as a liquid fertilizer, followed by
 - a) experiments in farmer's fields at H.D. Kote taluk and
 - b) conduct field experiments to study the effect of bio char enriched with urine on soil properties, growth and yield of crops.
2. Arghyam's NGO partner, MYKAPS worked in H.D. Kote and Kamasamudram to ensure use of urine from Ecosan Toilets through drip/ surface irrigation.
3. Demonstration of growing 3 or 4 vegetables crops using human urine applied through drip system under green house conditions at GKVK.
4. Developing protocol on use of composted humanure to localize and contextualize handling, transportation, composting and application of humanure.
5. Conducting workshops on preparation of *Jeevamrutha* and *Panchagavya* using humanure and its use for growing crops organically.
6. Developing communication workshops on preparation of *Jeevamrutha* and *Panchagavya* using humanure and its use for growing crops organically.
7. Arranging a workshop for Arghyam partners, other agriculture universities for dissemination of technology.





01

Outputs

1. Scientific data on safe handling of anthropogenic liquid waste, converting this to enriched manure (using bio-char) and application of urine to field crops and vegetables in farm lands.
2. Guidelines for the safe use of waste-water, excreta and grey water.
3. Publication of scientific research in journals.
4. Knowledge sharing among farmers, Agricultural Universities- Researchers, Government agencies such as Agricultural Department, State Pollution Control Board, Water Supply and Sewage Board and NGOs.
5. Demonstration plots at GKVK showing the results of this research.



02

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Project name

Monitoring Exercise in Integrated Urban Water Management (IUWM) at Rainbow Drive Layout, Bangalore

Partner

The Rainbow Drive Plot Owners Association and Biome Environmental Solutions Pvt. Ltd.

Partners' profiles

Biome Environmental is a Bangalore-based firm focused on ecology, architecture and water. Created by the 2008 merger of Chitra K. Vishwanath Architects and Rainwater Club, Biome's diverse team includes designers, architects, civil and mechanical engineers and urban planners. Biome specializes on architectural design, environmental and site planning, water sustainability solutions and training and education.

www.biome-solutions.com

Project summary

Rainbow Drive (RBD) is a private, gated residential layout that is representative of an increasingly common land-use pattern in growing cities like Bangalore. Like many other private layouts, RBD is situated outside the limits of the city's water utility, and its residents were left to fend for their own water needs after the departure of the developer. RBD's Plot Owners' Association (POA) has responded to these tasks with sustainability in mind, rather than adopting reactive coping strategies.

The layout of about 200 households had used up water from four of its six borewells and was dependent on the remaining two, whose output was diminishing. Faced with the prospect of buying water from tankers, residents directly addressed the problem through an integrated urban water management approach (IUWM). The approach tries to achieve sustainability by balancing consumer demand with the necessity of replenishing supply.

Karnataka



Duration

December 2009 – May 2011 (18 months)

Budget (INR)

25 Lakhs

Project location

Rainbow Drive Layout, Bangalore

Reach

220 households
(direct & indirect beneficiaries)

Rainbow Drive

Outputs

A detailed history of Rainbow Drive Layout, which can account for the factors that led it to seek out alternative methods for achieving water security. Some of the information gathering was to get details of the demographics of the Rainbow Drive residents, how did they recognize the need for IUWM, how did the group of concerned residents organize themselves to take action.

The performance monitoring of the installed RWH systems at the household and community level was conducted. This included a survey on consumer attitudes toward the RWH systems and other sustainable water management practices, focusing on key stakeholders (households and members of POA) and issues such as : reasons for choosing or not choosing to install household-level RWH, Arguments against household and community-level RWH, perceived value of household and community-level RWH systems before and after installation on water quantity and quality.

Seasonal variation vis-à-vis perceived value of RWH and any influence this may have on system maintenance behaviors.

Developing monitoring systems that will enable the collection of metrics over the next three to five years. Monitoring systems include the purchase of borewells and overhead tank meters. A simple formula worksheet that inputs data from metered borewells and overhead supply tanks, maintenance costs, duration of pumping and borewell electricity consumption, and produces figures on borewell yield and the production cost of water.

The outputs from this report provide a best practices manual for the owner of household within a layout, list of key questions and considerations for potential homeowners to ask of their builder/developer. A monitoring exercise report providing all Rainbow Drive data findings, as well as a detailed monitoring framework explaining the rationale for each monitoring process and how the data was collected and analyzed.



03

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Project name

Implementation and performance evaluation of Soil Biotechnology Plant for wastewater treatment

Partners

Vision Earth Care, ACCEPT Society

Partners' profiles

Vision Earthcare (VEC) is a technology company, committed to delivering eco-friendly products and solutions in the area of water treatment.

<http://www.visionearthcare.com/>

ACCEPT exists for the care and support of HIV/AIDS infected/affected people in Bangalore, India. Our acronym explain what we do Aids Couselling Care Education Prevention and Training.

<http://acceptindia.org/>

Project summary

Untreated sewage water is a significant and widespread problem in both cities as well as in rural areas. With rising population comes a rise in the consumption of water, which results in large amounts of waste water. While there exists solutions, they come with disadvantages that have prevented them from gaining popularity and wide acceptance. There is a clear need for new solutions that meet this need. It is this need that Arghyam wanted to fulfil by supporting the installation of a 15KLD (kiloliter per day) domestic wastewater treatment plant using an innovative, indigenous technology called Soil Biotechnology (SBT). SBT is a wastewater treatment process, which is based on a bio-conversion process where fundamental reactions of nature, namely respiration, photosynthesis and mineral weathering take place in a media housing micro & macro organisms which bring about the desired purification. SBT is an oxygen supplying biological engine and so the process can treat all types of water – domestic, municipal and industrial.

Karnataka



Duration

August 2009 to March 2011

Budget (INR)

Project location

ACCEPT Society, Bangalore

Vision Earth Care ACCEPT Society

The ACCEPT Society in Bangalore, which is a AIDS hospice was looking for a solution for their wastewater as their existing borewell supply was not sufficient to meet their water requirements. This provided Arghyam with an opportunity to test and validate SBT as a technology.

This action research addressed the challenges of wastewater treatment in India by seeking to assess and consider SBT's effectiveness in treating wastewater, through the analysis of the construction and operation of one such treatment facility at ACCEPT Society.

Hinren Technologies carried out the civil construction work based on parameters set by Vision Earth Care (VEC). The installation of all mechanical and electrical works was done by VEC. After construction and commissioning of the SBT plant, Arghyam regularly monitored the SBT plant. Water samples were periodically tested by an external laboratory for all relevant parameters.

Outputs

Installation of a wastewater treatment plant, using soil biotechnology, of 15KLD (Kilolitres per day) capacity at the campus of ACCEPT Society, which provides water to support the agricultural and horticultural activities on the campus.



04

Project name

Integrated Urban Water Resources Management Program at Doddaballapur, Bangalore

Partner

Svaraj

Partner profile

Svaraj (Society for Voluntary Action Revitalization and Justice) is a national voluntary organization working for the last 35 years on environmental protection & regeneration and fighting poverty & injustices. The organization believes in equipping the poor to claim their rights & lead their own development; and seek to do this by linking innovative community initiatives to state & national advocacy.

<http://svaraj.in>

Project summary

There is a growing need to sensitize citizens living in urban areas to understand how to manage their water and sanitation better. This project helped the Doddaballapur city municipal council move towards improved accessibility, availability and affordability to safe and sustainable water supply and sanitation services to citizens, through community, the municipality and other stakeholder actions. The project was implemented in the upper catchments of Arkavathi river and promoted integrated urban water resources management.

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Karnataka



Duration

January 2009 – September 2012
(44 months)

Budget (INR)

84 lakhs

Project location

Doddaballapur district in Bangalore,
Karnataka

Reach

This project directly benefitted
2500 people

Svaraj

Outputs

1. A civic group 'Doddaballapura Abhirudhi Samithi' promoted and trained to take on the larger responsibility of community sensitization, campaign and lobbying with CMC, TP and elected representatives
2. Water sources were rejuvenated and created:
 - a. Two *Kalyanis* (water tanks) were rejuvenated with the help of shramdhans and volunteers.
 - b. The Nagarkere tank was rejuvenated
 - c. 195 households implemented rainwater harvesting techniques for drinking purposes
3. Upper catchment rejuvenation was promoted, which resulted in soil moisture conservation and groundwater recharge.
4. 50 public and private water sources were tested for water quality.
5. Over 55 families living in slums were motivated to access safe sanitation.
6. Viability of composting green municipal waste was demonstrated by self-help groups.



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Project name

'Jala Jagruthi' – An action research project in Integrated Urban Water Management (IUWM) in Mulbagal town

Partners

Town Municipal Council, Mulbagal
Directorate of Municipal Administration
MYRADA
Indian Institute Science (IISc.), Bangalore

Partners' profiles

Town Municipal Council, Mulbagal
<http://www.mulbagaltown.gov.in/>

Directorate of Municipal Administration
The State Government of Karnataka, through the

Directorate of Municipal Administration supervises the functioning of the municipalities. The Directorate has the responsibility to supervise the function of the municipalities, work out suitable human resource policies, exercise disciplinary control over the staff of municipalities, monitor the tax collection of ULBs, lay down policies for transparency in expenditures, hear appeals against the decisions of municipalities, release the Government transfers to the ULBs, as well as implement schemes like SJSRY (for urban poverty alleviation), IDSMT, Nirmala Nagar. The Directorate also collects statistics from ULBs and helps in the preparation of municipal statistics. The Directorate also inspects municipalities, interacts with both elected representatives and the employees to find out both genuine and specific problems of urban administration and urban municipal services and work out the solutions for those problems.

Karnataka



Duration

April 2007 - March 2012 (60 months)

Budget (INR)

5.33 Crores

Project location

Mulbagal town, Kolar district

Reach

The project directly benefitted around 50,000 residents of Mulbagal town

Directorate of Municipal Administration
Town Municipal Council, Mulbagal
MYRADA
Indian Institute Science (IISc.), Bangalore

<http://www.municipaladm.gov.in/>

MYRADA

MYRADA has been the one of the pioneer organizations who build institutions of the poor and marginalized which are appropriate to the resource to be managed, and the objective to be achieved. They work to ensure sustainable development of rural areas and improving quality of life. They build institutions, strategies and skills through poor families can secure a livelihood.

<http://myrada.org/myrada/>

Indian Institute Science (IISc), Bangalore

The Indian Institute of Science (IISc), set up in May 1909, was conceived as a 'Research Institute' or 'University of Research' by Jamsetji Nusserwanji Tata. The Institute offers a variety of Master's degree programs in Engineering, an integrated Ph.D. (post-

B.Sc.) program in Sciences and Ph.D. programs in a wide spectrum of disciplines in science and engineering. The research laboratories at the Institute are extremely well equipped. Many national facilities are housed at the Institute. The library and computational facilities at the Institute are amongst the best in India. The Institute hosts hundreds of visitors from India and abroad every year and is the venue for many major national and international academic events.

<http://www.iisc.ernet.in/>

Project summary

Water supply for residents is a big challenge in urban India, and is more so in small towns, where institutionally and organisationally there are not enough trained and qualified people. In early 2007, Arghyam decided to venture into the urban water



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town in Kolar district, 100 kms from Bengaluru. From 2007 to 2012, several activities were taken up under this programme with a consortium of partners from government, civil society, academic, and other water sector institutions.

Over the course of five years, this multi-phase initiative included first, a Preparatory phase of engaging the local and state government stakeholders and developing the partnerships.

This was followed by the Foundation phase which involved a series of studies to identify issues, mobilising the local community, and setting up the Project Support Unit (PSU). Third was the Planning and Design phase, during which appropriate interventions were planned, based on the evidence generated and prioritised by the local stakeholders.

The fourth phase, Implementation, involved guiding the local actors in implementing a few targeted interventions. The final Operations and Maintenance (O&M) phase involved building local capacities and strengthening institutional or community structures to manage the interventions.



Outputs

1. A three year groundwater behaviour study to model and understand the feasibility of continued dependence on groundwater for meeting the town's future needs.
2. A study was conducted to probe water quality issues.
3. An energy audit of all pumping stations to measure the efficiencies and performance levels was conducted.
4. A household water and sanitation survey was conducted.
5. Additional studies included a water asset survey, which resulted in mapping of the entire distribution network in the town, and studying its performance.
6. GIS mapping of all the 1,375 households without toilets.
7. Performance enhancement in one pumping station as a pilot project.
8. Twelve defunct community toilets were repaired and their ownership transferred to the Town Municipal Council (TMC) by the Slum Board. Four community toilets were brought back to use with a community-managed model.
9. A locally customised solid waste management initiative has been designed and implemented for 750 households in 3 wards.
10. A defunct rainwater harvesting structure in a local school was repaired and made functional.
11. Applications for toilets for 240 households under the Integrated Low Cost Sanitation (ILCS) scheme were developed, approved by the local authority, and submitted to the Government of India (GoI).
12. Revival of an ancient temple tank (*Kalyani*).





ODISHA



01

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Project name

Strengthening community centric governance through integrated water, sanitation and waste management

Partner

National Foundation for India (NFI)
Health and Development Initiative (HDI)

Partners' profiles

National Foundation for India (NFI)

National Foundation for India (NFI) was set up in 1992 with the vision to help create a just and equitable society, by enabling marginalised communities to improve the quality of their own lives, by improving public understanding of social issues and promoting social justice. NFI makes grants to support voluntary organisations working in poverty endemic and difficult parts of the country.

<http://www.nfi.org.in/>

Health and Development Initiative (HDI)

HDI is an NGO working for the poor and the disadvantaged since 2000. It is a multi-service social organisation in Odisha, providing diverse services and solutions to different development related problems. Its activity range covers action, training and research in the development sectors of livelihood, women empowerment, forestry, income generation, governance, water and sanitation, medicinal plants, HIV/AIDS, reproductive and child health etc.

<http://www.hdi.ind.in/>

Project summary

This project was conceptualised, designed and implemented in the context of rapid urbanisation as a model of participatory community centric governance by forming bodies of people at the primary levels, of both neighbourhood and ward. Besides water supply, sanitation and waste management, the project introduced and demonstrated the concept

Odisha



Duration

January 2009 – September 2012
(44 months)

Budget (INR)

84 lakhs

Project location

Doddaballapur district in Bangalore,
Karnataka

Reach

This project directly benefitted
2500 people

National Foundation for India (NFI) Health and Development Initiative (HDI)

of integrated water management. Individual toilets, community toilets, soak pits and drains were constructed and ideas for liquid waste disposal, treatment of liquid waste before emptying it in water sources, renovation of water bodies, were attempted under this project.

The concept of community mobilisation was critical to the project and was the guiding principle to bring in ownership among people towards their problems and also to ensure sustainability in all the approaches initiated. In this, processes were initiated with dialogues among members of the community to determine who, what, and how issues are decided, and went on to also provide avenues for everyone to participate in decisions that affected their lives and strengthen inclusive governance processes.

Outputs

1. Mapping, studies on the wards and secondary research on Cuttack, to understand macro-level picture of services and issues.
2. Awareness, training and capacity building at the ward level to gain a deeper understanding of the process and town level to appreciate such issues and models

Facilitating, building and strengthening social platforms and social capital in wards 34 and 52.

Demonstration of small models of decentralised, inclusive and participatory social and physical development such as the revival of local water bodies, construction of individual toilets, low cost water structures to ensure access to potable water, decentralised community governed waste management systems.

3. Capacity building of CMC & elected representatives on participatory governance mechanisms by providing technical support to CMC.



TAMIL NADU



01

Project name

Improving water and sanitation in urban slums in Trichy

Partner

Gramalaya

Partner profile

Gramalaya has been working for more than two decades in Tamil Nadu with a focus on issues surrounding water and sanitation. It has worked with donors like WaterAid, Water.org and Arghyam to create participatory, community models for urban and rural sanitation. It has a dedicated training centre - NIWAS for Water & sanitation training. GUARDIAN, Gramalaya's MFI provides microfinance to Gramalaya's projects. The organization plans to expand into areas outside Tiruchirapalli and also work on livelihood issues.
<http://www.gramalaya.in>

Project summary

The benefits of rapid growth and development of cities do not reach all its citizens equitably. Slum dwellers are invariably left out and do not have access to even basic infrastructure such as water supply and sanitation. Compounding this problem is the existence of slums and its occupants that the city does not recognize. This project sought to provide water and sanitation facilities to people in a sustainable manner. This was accomplished by adopting the following strategies:

1. Advocacy with government to renovate community toilets and enable them to be managed by Self Help Groups
2. Training Self Help Groups to manage pay and use community toilets
3. Raising awareness on hygiene and safe water and sanitation practices

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Tamil Nadu



Duration

December 2009 – May 2011 (18 months)

Budget (INR)

25 Lakhs

Project location

186 slums in the Tiruchirapalli district of Tamil Nadu

Reach

This project has directly benefitted over 5,700 people and indirectly benefitted around 15,600 people


Gramalaya

4. Helping people get individual water connections and sanitation units and linkage to credit through GUARDIAN Microfinance
5. Initiating community managed water and sanitation facilities in the newly approved Trichy slums

The project was supported by Gramalaya's strong women's federation (WAVE) and Association for Water and Sanitation, Hygiene (AWASH) committees formed under this project.

Outputs

1. Awareness building workshops and training to community on importance of good sanitary facilities and hygiene practices.
2. Around 150 AWASH Committees formed.
3. Entire amount for hardware, over Rs. 200 Lakhs, was leveraged from various sources such as SHGs, GUARDIAN MFI and beneficiaries themselves.
4. Around 50 household rooftop rainwater harvesting structures constructed to give households access to safe drinking water.
5. Over 430 water connections were provided to households, for which over 36 Lakhs was leveraged.
6. Over 90 household filters were installed to ensure water was free of contamination, for which over Rs. 2 Lakhs was leveraged.
7. About 830 families were motivated to construct toilets, for which Rs. 99 Lakhs was leveraged.
8. 20 community toilets renovated/ constructed, for which Rs. 67 Lakhs was leveraged.



ACROSS INDIA



01

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Project name

Support for research on privatisation and reforms projects, policies and processes in the water sector

Partner

Manthan

Partner profiles

Manthan Adhyayan Kendra is the implementing arm of the Manthan Research and Social Development Society. Its main focus is on monitoring, analysis and researching water and energy related issues, with a special focus on the latest developments resulting from the liberalization, globalization and privatization of the economy. This is in the larger context of just, equitable and sustainable development.

www.manthan-india.org

Across India

Duration

February 2012 – January 2014
(24 months)

Budget (INR)

13 Lakhs

Project location

Across India

Reach

This project was found useful by citizens, water sector professionals, academicians, the government, and civil society organizations all over India.

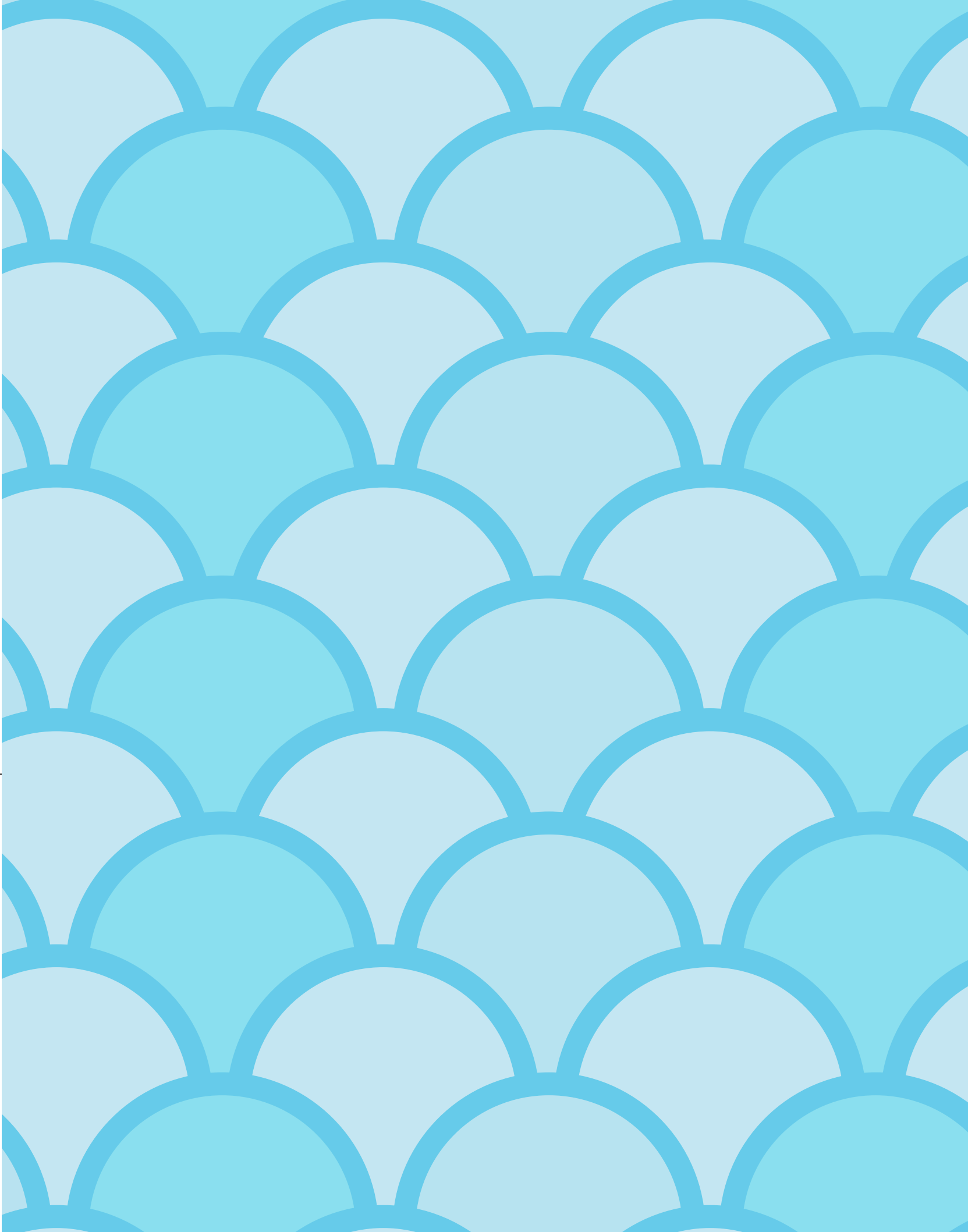
Manthan

Project summary

Various local groups across India are unaware about the issues around water privatization. Manthan focused on research on the privatization of the water sector. This project included study of privatization/reforms projects and policies in the water sector. Manthan also studied alternatives for private water supply/long distance water transfer projects. The project facilitated the distribution of the collected information via studies, articles and booklets. It also engaged with local groups that were tackling privatisation to provide support.

Outputs

1. Documentation of privatization and reform projects, as well as water sector projects in states like Madhya Pradesh, Rajasthan, Uttar Pradesh, Maharashtra and Chhattisgarh.
2. Critique and analysis of privatisation/ Public Private Partnerships (PPPs) in urban and industrial water supply including Khandwa, Dewas and Shivpuri.
3. Study and analysis of the impacts on water resources required for the projected development and economic growth across the country.
4. Interventions and presentation of views on new developments in the policy and legal regime.
5. Made a Member of the Planning Commission's Plan Implementation Advisory Committee on Industrial Water.





India waterportal



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01

Project name

Media Chaupal, Delhi

Partners

Madhya Pradesh Council for Science and Technology, Spandan, Indian Science Writers' Association

Partners' Profiles

Madhya Pradesh Council for Science and Technology was established under MP Society Registration Act, 1973 in October, 1981. The apex body of the Council is a General Body and the Chief Minister is the President of General Body. The main objective of the Council is:

To identify area in which Science and Technology can be utilized for achieving socio-economic objectives of the State and in particular the objectives of tackling

New Delhi



Project date

11-12 October, 2014

Project location

Indian Institute of Mass
Communication, New Delhi

Reach

Approximately 250 Journalists

the problems of backwardness, unemployment and poverty in the rural areas and among the under-privileged sections of society such as Scheduled Castes, Scheduled Tribes, Landless labour, artisans, small and marginal farmers and women.

<http://mpcost.nic.in/>

Spandan is a non profit registered organisation based in Bhopal. It works closely with various Government departments to create awareness and empowerment of the local communities.

<http://www.spandanfeatures.com/>

Indian Science Writers' Association is a registered society based in Delhi. The main aims and objectives of the society,

which has been established in response to the increasing need and scope of science popularization and technical communications, is to bring together the vast number of working and freelance science journalists in the print, broadcast and television media and act in the larger interest of popularization of science among the community.

<http://iswaindia.com/>

Project summary

A two day residential workshop for journalists was organised in Delhi. The main focus of the workshop was on rivers, water and the environment. More than 250 journalists took part in this Media Chaupal, where issues related to water, rivers and technology were

discussed. Participants were from print, electronic and online media, including writers, videographers, bloggers and freelancers.

Apart from issues related to rivers and water, several participants presented an overview of the changing scenario of the media in India.



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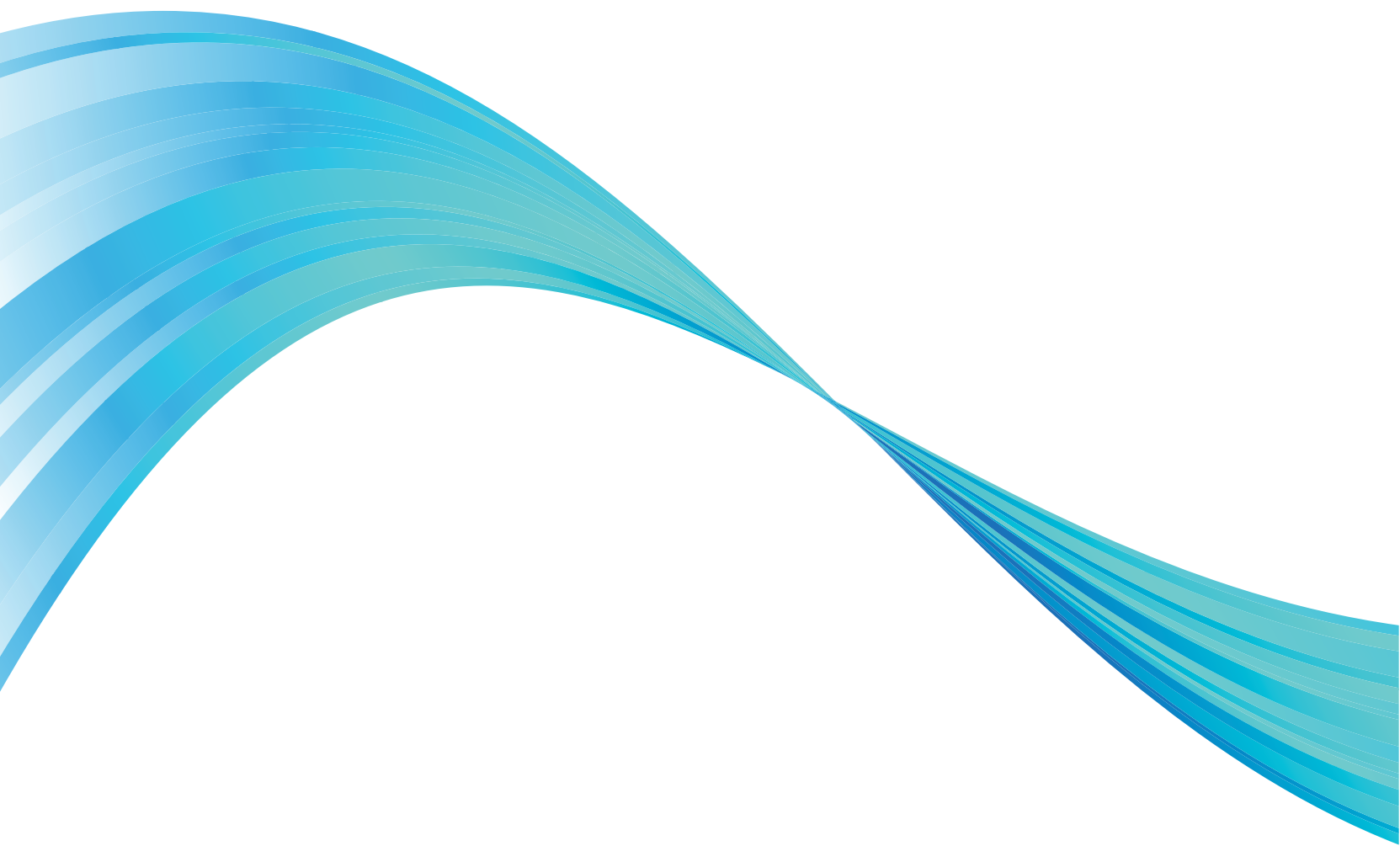


Outputs

1. More than 300 media houses, leading mainstream newspapers and magazines published content focused on issues of water and rivers.
 2. More than 10 original stories were shared with Hindi Water Portal (HWP) by eminent writers.
- ▶ <http://www.niveditakhandekar.com/?tag=aaj-bhi-khare-hai-talaab>
 - ▶ <http://scroll.in/article/677189/For-more-than-20-years,-a-slim-book-has-helped-Indian-farmers-become-self-reliant-in-water>
 - ▶ <http://hindi.indiawaterportal.org/node/48267>
 - ▶ <http://hindi.indiawaterportal.org/node/48443>

- ▶ <http://hindi.indiawaterportal.org/node/48444>
- ▶ <http://hindi.indiawaterportal.org/node/48217>
- ▶ <http://hindi.indiawaterportal.org/node/48255>
- ▶ <http://hindi.indiawaterportal.org/node/48253>
- ▶ <http://hindi.indiawaterportal.org/node/48247>
- ▶ <http://hindi.indiawaterportal.org/node/48258>
- ▶ <http://hindi.indiawaterportal.org/node/48230>
- ▶ <http://hindi.indiawaterportal.org/node/48306>
- ▶ <http://www.hindi.indiawaterportal.org/node/48166>

3. Advocacy for HWP as a source of knowledge for water issues.
4. Mainstream writers expressed an interest to contribute to HWP
5. More scientific content on environmental issues was made available in public domain through HWP and other media.



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Project name

World Water Day 2014

Partners

Prem Vijay Patil, Bureau Chief; Nai Dunia
Dhar, M.P.

Lokbharti Uttar Pradesh, Hazratganj

Partners' Profiles

Prem Vijay Patil is the Bureau Chief of a national daily called Nai Dunia, in Dhar, Madhya Pradesh. He works closely with local communities in rural Madhya Pradesh and is an RTI activist.

<http://naidunia.jagran.com/>

Lokbharti is a registered non profit organisation based in Lucknow, Uttar Pradesh. It has worked on issues related to environment, water, agriculture and rivers

Madhya Pradesh + Uttar Pradesh

Event date

March 2014

Project location

Madhya Pradesh, Uttar Pradesh

Reach

Approximately 1000 participants
at 3 locations

since 1991. It has prepared a Gomti River Revival Action Plan for the State Government, with which it is now working very closely.

<http://www.lokbhartiindia.com/>

Project summary

Hindi Water Portal organised two events on World Water Day 2014, focussing on different themes as per the challenges faced in different areas. The events in two villages of Madhya Pradesh aimed to spread awareness on water quality issues with a specific focus on fluoride contamination in groundwater. Villagers were given practical exposure to a problem that affects 6.6 crore people in 19 states in India. It also aimed to spark interesting discussions on water quality in a public forum like a village chaupal,

so that villagers especially women learned more about the issue and could take necessary precautions.

The event in Lucknow focused on the restoration of the Gomti River, and aimed to spread awareness among local communities on the need for a clean river.

Outputs

1. Villagers in M.P. came to know about the impacts of fluoride contaminated water.
2. Grassroot reports and articles on HWP

<http://hindi.indiawaterportal.org/node/47015>

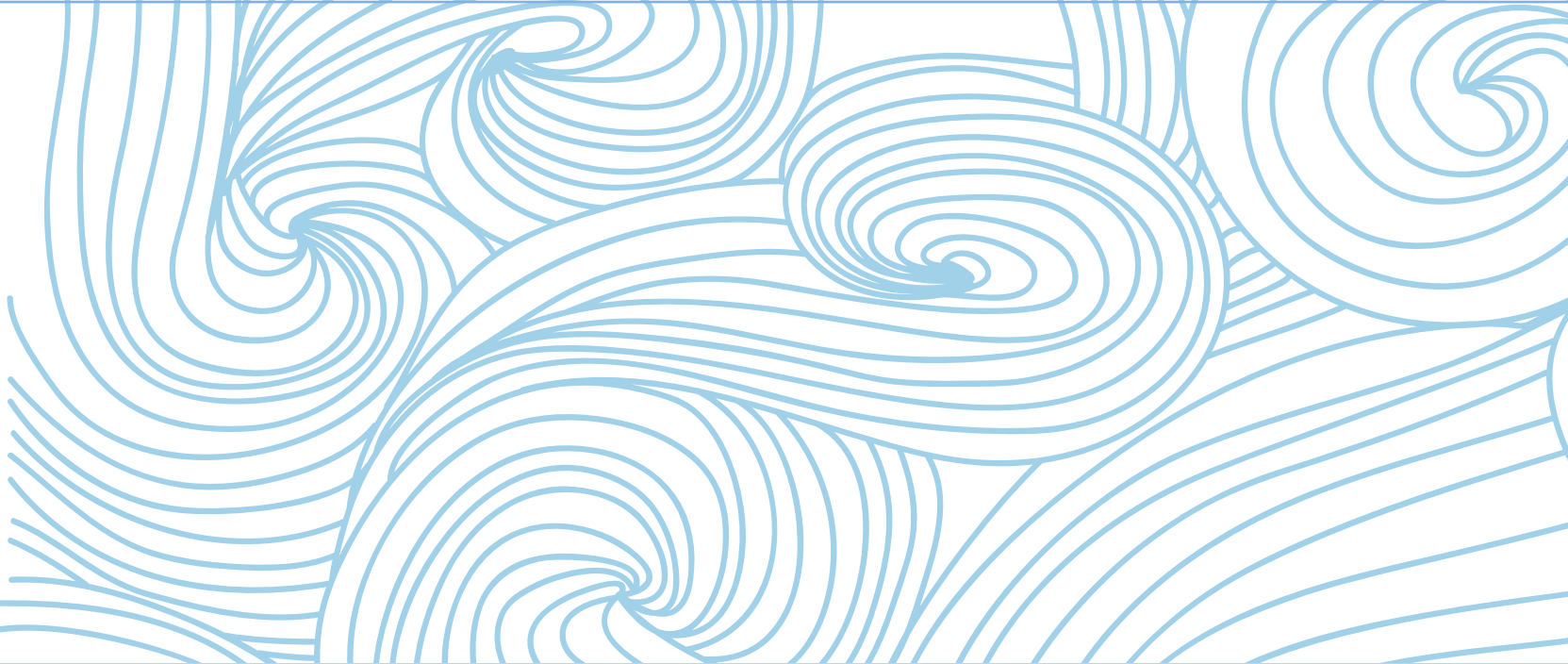
<http://hindi.indiawaterportal.org/node/47006>

<http://hindi.indiawaterportal.org/node/46996>

<http://hindi.indiawaterportal.org/node/47580>

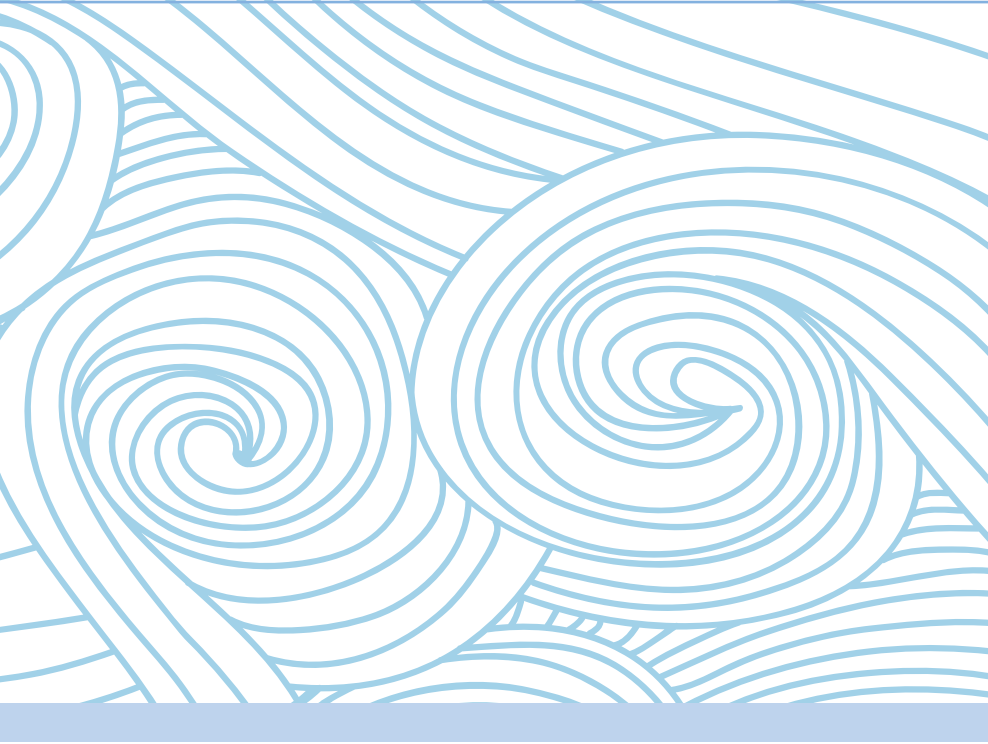
<http://hindi.indiawaterportal.org/node/46962>

<http://hindi.indiawaterportal.org/node/47023>



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<http://hindi.indiawaterportal.org/node/44577>

http://hindi.indiawaterportal.org/fluorosis_Intervention

http://hindi.indiawaterportal.org/skeletal_Fluorosis

<http://hindi.indiawaterportal.org/akankaliyafluorosiskavivran>

<http://hindi.indiawaterportal.org/>

3. People started to restore their community ponds, demonstrating collective action.

4. A website dedicated to Gomti River in Hindi <http://river.gomti.in/> was launched at the Lucknow event.

5. Photographs, case studies, research articles on water quality issues and a River Revival action plan draft were shared with HWP. Lokbharti, Locals prepared this Action plan in collaboration with HWP; this can be seen here

<http://hindi.indiawaterportal.org/node/47018>

<http://hindi.indiawaterportal.org/node/46964>

6. After the event in Lucknow, the government declared a Gomti River Restoration Project.



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Project name

World Water Day 2014

Partner

The Institution of Engineers India (IEI)
Global Water Partnership (India Chapter)
Neer Foundation
Bishop Cotton School and St Thomas School
in Shimla
WWF Shimla chapter
IIT Mumbai
Gram Pari
State Institute for Rural Development (SIRD)
Sikkim
Department of Urban Administration and
Development (DUAD)
Department of Women and Child
Development (WCD)

Multiple Locations



Event date

March 2014

Project location

Meerut, Shimla, Mumbai, Chennai, Namchi (Sikkim), Bangalore and Raipur

Reach

About 800 people were a part of the events, which included NGOs, government officials, farmers, social work students, school students, and experts in the sector.

Department of Health and Family Welfare (HFW)
IIHMR Jaipur, Health of the Urban Poor Program (HUP)

USAID and Population Foundation of India
The Alternative

<http://www.ieindia.org/>
<http://www.cwp-india.org/>
<http://neerfoundation.com/>
<http://www.thealternative.in>

Project summary

Team members of India Water Portal across the country partnered with various individuals and institutions to organise events, workshops and conferences around water to mark World Water Day in March 2014. Seven places across India

were represented and covered through the campaign, namely Meerut, Shimla, Mumbai, Chennai, Namchi (Sikkim), Bangalore and Raipur.

Outputs

1. A conference on the water-energy nexus bringing together NGOs, social work students, government officials, farmers and experts
2. An interactive session on rainwater harvesting with students
3. A 3-day grassroots comics workshop.

Collaborative initiative of various partners



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Project name

Documentary series on water management by Lok Sabha TV

Partner

Lok Sabha Television

Partner Profile

Lok Sabha Television broadcasts live telecasts of the proceedings of the Lok Sabha – the House of the People of the Indian Parliament. The channel also produces and telecasts a whole range of programmes of general interest on issues relating to democracy, governance, social, economic and constitutional issues and citizens' concerns. Debates, discussions and documentaries, as well as programmes on culture and award-winning films in different



Project date

November 2013

Project location

Dewas, Madhya Pradesh;
Laporiya, Rajasthan;
Uffereinkhal, Uttarakhand

Reach

Members of Parliament and policy makers at the Centre

Indian languages are important elements in the channel's programme.

<http://loksabhatv.nic.in/>

Project summary

There is lots of work happening in water conservation and management in different parts of the country. Many traditional practices are unsung and not replicated because of a lack of awareness. Thus, the Hindi Water Portal partnered with Lok Sabha Television to share some water conservation practices with a wider audience, particularly with Members of Parliament. A series of documentaries were telecast by Lok Sabha TV, advocating sustainable solutions for water management.

Till date, three documentaries have been produced in the series: *Dewas Ke Bhagirath*, *Laporiya* and *Uffereinkhal*.

Dewas Ke Bhagirath is a film about the farmers of Dewas district in Madhya Pradesh. Dewas is a water scarce area, yet the farmers here have become prosperous simply by using traditional methods of water conservation. This film clearly shows the economics of water.

Laporiya is a film set in Rajasthan, again a water scarce area. This film shows how people have learnt to live with very little water, and how they conserve it. The film shows how such practices have not only stopped migration but improved livelihoods too.

Uffereinkhal is a film set in Uttarakhand, highlighting the benefits of the traditional knowledge of *chal* and *khal* construction. This knowledge contributed to the revival of the Gad Ganga river.



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Outputs

1. Documentaries have been screened more than 80 times.
2. These documentaries have been used as an advocacy tool for sustainable water management solutions, to parliamentarians.
3. The Governments of Uttar Pradesh and Uttarakhand have passed circulars to give more emphasis to construction of ponds.
4. Uttarakhand Chief Minister has mandated the construction of 1 lakh ponds.
5. UP administration has sent a delegate of geo-hydrologists to promote the construction of ponds in Bundelkhand region.



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Project name

Sustainable Mountain Development Summit

Partner

Sustainable Development Forum Nagaland

Partner Profile

Sustainable Development Forum Nagaland (SDFN) is a registered not-for-profit forum where Naga civil society, academia, entrepreneurs, government and the media collectively discuss and work in facilitating the state towards a sustainable development pathway. The SDFN aims to facilitate dialogues, research and sustainable policy, keeping in mind the state's economy, environment and issues of leadership, research and documentation.

<http://sdfnagaland.org/>

Nagaland



Event date

September 2013

Project location

Nagaland

Reach

About 300 participants including bureaucrats, policy-makers / legislators, NGOs, students and the media from the 11 Indian Himalayan states participated in the Summit

Project summary

IWP co-organised the water theme of the 3rd Mountain Summit at Kohima, Nagaland along with Sustainable Development Forum Nagaland (SDFN) in September 2013. Inputs on water issues in the mountain states were presented and solutions discussed. Based on this, a policy paper was prepared, which formed a part of the overall Sustainable Mountain Development Summit policy paper on three themes – water, forests and agriculture.

Outputs

1. A call for contributing papers / articles was made through India Water Portal
2. 26 contributions were received
3. Six anchors comprising experts from the water sector reviewed the papers
4. An overall synthesis paper was developed
5. This synthesis paper was presented at the water thematic session
6. The paper formed the basis for a policy paper for the Sustainable Mountain Development Summit.



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Project name

Construction and digging of *talaabs* in Mahoba District, Bundelkhand

Partners

District Administration, Mahoba and Apna Talab Abhiyan

Partners' Profiles

District Administration, Mahoba UP:
Eastwhile District Magistrate IAS Anuj Jha and other officials working on water, farming and IWMP

Apna Talab Abhiyan:

A society based in Mahoba which promotes water conservation



Project date
2013

Project location
18 villages

Reach
Direct reach to 400 families and indirectly to many more in 18 villages

Project summary

Bundelkhand is a water scarce and drought prone area. The Hindi Water Portal team tried to provide sustainable solutions for water conservation and management in this region. Since the major source of income is farming, the main focus was to conserve water for irrigation.

Individual ponds (talaabs) were also excavated by farmers in collaboration with the district administration. Till date, more than 300 ponds have been constructed, thus improving livelihoods and increasing agricultural production.

Outputs

1. Water conservation
2. Groundwater level has risen slightly
3. State administration passed a notice to promote ponds as a solution for water security.
4. State administration has passed a circular to spend allocated budget from various schemes on creating and maintaining ponds.
5. The Forest Department, inspired by the success of this traditional and scientific solution, excavated many more in forest areas.
6. Students from foreign universities visit to study the changes brought about by these traditional techniques.
7. Zee Sangam Channel has air a documentary on this work on April 9th, 2015 at 9:30 pm. under Swaraj Series program.



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Project name

Schools Water Quality Testing Programme

Partner

Oracle Education Foundation

<https://www.oraclefoundation.org>

Kendriya Vidyalaya Sangathan

<http://kvsangathan.nic.in/>

Partners' Profiles

The Oracle Education Foundation is a non profit organization funded by Oracle established in 2000. The Oracle Education Foundation sponsors a project called ThinkQuest (www.thinkquest.org), an online learning platform that helps students develop important 21st century skills, including communication, critical thinking, and technology skills.

Across India



Event date

December 2011 – March 2012

Project location

Across India

Reach

Approximately 20,000 students across 1,348 schools

Kendriya Vidyalaya Sangathan is a network of secondary and senior secondary schools across India that follows the CBSE syllabus. There are currently 1,092 Kendriya Vidyalayas across India.

Delhi Public School is one of the largest education institutions in India that follows the CBSE curriculum. There are currently over 150 DPS' in India.

Project summary

To create awareness on water quality issues with a specific focus on fluoride contamination in groundwater, Schools Water Portal and Oracle Education Foundation partnered on a nationwide programme to engage middle and high school students from across the country

in a water quality testing, analysis and reporting exercise. The project aimed to give students practical exposure to a problem that affects 6.6 crore people in 19 states in India. It also aimed to spark interesting discussions on water quality in a classroom so that students learn more about the issue first-hand.

Output

1. Map of indicative fluoride levels in groundwater, submitted by schools across the country
2. Photographs, videos and case studies from students who participated in the programme



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Project name

Water Hackathon

Partner

World Bank's Water and Sanitation Program (WSP)

Indian Institute of Human Settlements (IIHS)

Partner Profile

WSP

The Water and Sanitation Program (WSP) is a multi-donor partnership, part of the World Bank Group's Water Global Practice, supporting poor people in obtaining affordable, safe, and sustainable access to water and sanitation services.

WSP works directly with client governments at the local and national level in 25 countries through regional offices in Africa, East and

South Asia, Latin America and the Caribbean, and in, Washington D.C.

<http://wsp.org>

IIHS

The Indian Institute for Human Settlements (IIHS) is a national education institution committed to the equitable, sustainable and efficient transformation of Indian settlements. IIHS aims to establish an independently funded and managed National University for Research and Innovation focused on the challenges and opportunities of India's urban transition. The proposed IIHS University will host an integrated programme of quality campus-based education and research, training and lifelong learning for working professionals, distance and blended learning, as well as a whole array of practice and





Event date

21st – 23rd October 2011

Project location

Indian Institute of Information Technology, Bangalore

Reach

100 participants (16 teams of developers)

advisory services. The university will have a strong interdisciplinary orientation bringing together theory and praxis that is grounded in the South Asian context and also engages with and draws from knowledge across the globe.

IIHS is a proposed networked institution across India. Its 55-acre mother campus in Bengaluru will consist of academic, research and social infrastructure including student and faculty housing and will be complemented by the IIHS City Campus, located in North Bengaluru.

IIHS has also been designated a National Resource Centre (NRC) by the Ministry of Housing and Urban Poverty Alleviation.

<http://iihs.co.in>

Project summary

The Water Hackathon aimed to challenge water experts and software developers from around the world to co-create the innovative solutions needed to help solve today's water problems. It was an event designed to seed a new community, bringing together software engineers and water experts to identify critical global challenges and project-specific problems in order to develop software to respond to them.

The Water Hackathon was a two-day marathon software coding event in multiple global locations, bringing together software developers from all over to hack on real-world water problems. World Bank partnered with

the Indian Institute of Human Settlements (IIHS) and India Water Portal to organise and conduct the Water Hackathon in Bangalore for the South Asia region.

The event was at the IIITB campus at Electronics City in Bangalore. There were almost 100 people and a total of 16 teams of developers, who picked from 14 problem statements or created their own challenge.

WATER HACKATHON OCT 21-23, 2011



Outputs

Mobile phone applications that would be useful for the water community and/or for the general public, were developed. Several applications that were created in the hackathon focussed on tracking and rating available public toilets (a prototype called PeeQ was created by one team), registering complaints about water services, tracking water usage better, and even one that aimed to attach a sensor to a smartphone that could assess water quality.



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Project name

Data Project

Partner

UNICEF

Delhi University

Keystone Foundation

National Environmental Engineering and Research Institute (NEERI)

Partner Profile

UNICEF

UNICEF is fully committed to working with the Government of India to ensure that each child born in this vast and complex country gets the best start in life, thrives and develops to his or her full potential.

The organisation began its work in India in 1949 with three staff members and established an office in Delhi three years later. Currently, it advocates for the rights of India's children in 16 states.

<http://unicef.org>

Government of India's official online open data platform.

Data.gov.in

Delhi University

The University of Delhi is the premier university of the country and is known for its high standards in teaching and research and attracts eminent scholars to its faculty. It was established in 1922 as a unitary, teaching and residential university by an Act of the



Across India



Event date

Started in December 2011

Project location

Across India

Reach

The main audience for the Data Project was the audience of IWP—water experts and practitioners, field-level NGOs, government, think tanks, universities, and corporates. The secondary audience was Open Data Advocates: software developers, designers, journalists, statisticians, researchers, transparency advocates, NGOs, Government and engaged citizens

then Central Legislative Assembly. The President of India is the Visitor, the Vice President is the Chancellor and the Chief Justice of the Supreme Court of India is the Pro-Chancellor of the University.

<http://du.ac.in>

Keystone Foundation

Keystone has been working in the Nilgiri Biosphere Reserve (NBR) over the last 21 years (since 1993) with indigenous communities on eco-development initiatives. During the last couple of years, seven thematic areas have taken form, derived from the original idea of a holistic approach to the issues of livelihoods, conservation & enterprise. These are livelihood, conservation, organic

market development, culture & people, environmental governance, training & information and finance & administration.

<http://keystone-foundation.org>

National Environmental Engineering and Research Institute (NEERI)

NEERI is devoted to research and innovations in environmental science and engineering besides solving a range of problems posed by industry, government and public. It is a constituent of Council of Scientific & Industrial Research (CSIR), New Delhi and has a nationwide presence with five zonal laboratories at Chennai, Delhi, Hyderabad, Kolkata and Mumbai.

<http://neeri.res.in>

Project summary

The IWP Data Project was started to understand what water data existed in the public domain, and to create a diverse and vibrant community that could use that data to enhance projects, advocacy and impact around major water sector indicators.

The Data Project aimed to act as a catalyst and innovator in the open data community, and to build the open water data community in India. While building this community, IWP also showcased exciting visualisations, analyses and stories so that the community could see the benefits of working with data. Secondary roles included advocating for

UNICEF, Delhi University, Keystone Foundation,
National Environmental Engineering and Research Institute (NEERI)



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open data and identifying new grantees for Arghyam.

There were 5 tracks conceived to actualise this strategy:

1. Data Research: researching water data to understand what data exists and where is it located.
2. Data Normalisation: putting data into open and accessible formats so that it can be analysed and used by multiple communities.
3. Platform Building: uploading data online on to multiple platforms ranging from the simple to the complex, so that people can use, and share it easily.
4. Community Building; grow a community in India around data and water by

building bridges between different communities (government, journalists, designers, etc.)

5. Analysis/Visualisation/Storytelling: creating good data stories around water using visualisation and analysis, and placing them in mainstream media.



Outputs

1. Published 100 years of climate change data (rainfall, temperature, humidity, etc). on IWP. This data set became one of the most popular sections of the portal, with 34,000 hits over the past 3 years. IWP receives more than 12 requests a month for this data. While water practitioners have used this data to predict crop sowing and cultivation patterns and implement rainwater harvesting infrastructure, they have also compared this data with locally collected data or Indian Meteorological Department data. Researchers used this data for climate change modeling and some citizens

have even used this data in unimaginable ways.

2. Found 300 datasets, of which 50 datasets were freed up
3. Advocated for 700 government datasets to be open
4. Wrote 42 data articles
5. Built 3 applications
6. Analysed and visualised several major datasets on urban water quality, groundwater, rainfall, and sanitation.
7. Helped build two communities:
 - (i) Open Data – 750 members
 - (ii) Water Data – 92 members
8. Events:
 - Two open data events
 - One water data consultation

9. Outreach:

Data Project presented to NIC, World Bank (DC), World Water Week, WSP, ISI (Bangalore), ISB (Hyderabad), MindTree, Google, TechCamp Mumbai, BarCamp Bangalore.



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Event date

3rd July 2010

Project location

Bangalore

Reach

The contest elicited 23 student category and 15 general category videos, covering 32 lakes of the city

Project name

Lost Lakes of Bangalore contest

Project summary

“The Lost Lakes of Bangalore” was a video project to document Bangalore’s many tanks and lakes which have vanished with unplanned urbanization and growth. As part of this project India Water Portal organised a contest to document this aspect of Bangalore’s history.

Outputs

To generate video content (films) on a local water issue in Bangalore through a contest.

<http://www.indiawaterportal.org/articles/awards-ceremony-lost-lakes-bangalore-video-contest>

Watch videos here:

<https://www.youtube.com/watch?v=f5zK-Povja5I&list=PLF88A3E8AD619D775>



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Project name

Rainwater Harvesting Mela

Partner

Bangalore Water Supply & Sewerage Board (BWSSB)

Karnataka State Council for Science and Technology (KSCST)

Bangalore Jalamandali Abhiyantara Sangha

Partner Profile

Bangalore Water Supply & Sewerage Board (BWSSB)

The Bangalore Water Supply and Sewerage Board (BWSSB) is committed to providing drinking water of unquestionable quality in sufficient quantity and to treat the sewage generated to the required parameters.



Event date

20th March 2010

Project location

Bangalore

Reach

Approximately 2,000 people

As the leader in providing water and sanitation services, BWSSB is recognized as an effective instrument of change through adopting state-of-the-art technologies for improving the quality of its services to the general public.

<http://mybwssb.org>

Karnataka State Council for Science and Technology (KSCST)

To sensitize the Science & Technology community to such problems, visionaries in Indian Institute of Science (IISc) and the Government of Karnataka [GoK] established the Karnataka State Council for Science and Technology [KSCST] in September 1975. Since then KSCST has been endeavoring to play the role of

a catalytic agent for promoting the use of Science & Technology products and services in the development process of the state.

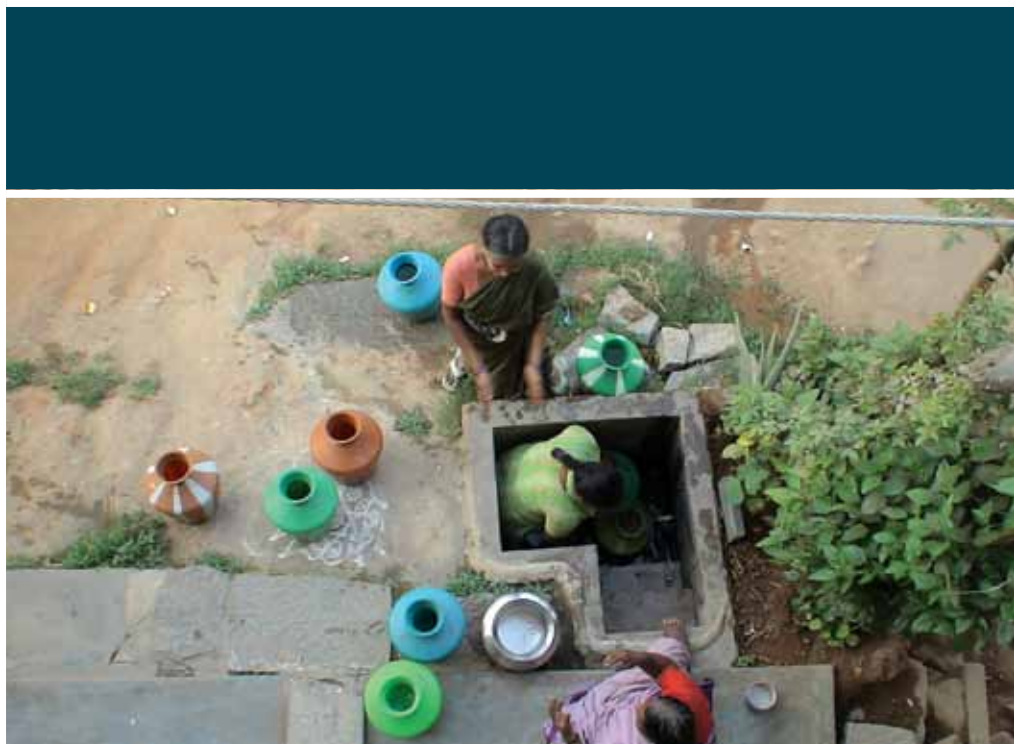
<http://kscst.org>

Project summary

The Bangalore Water Supply and Sewerage Act, 2009 stipulated that a large number of existing and new buildings in Bangalore need to implement rainwater harvesting by May 2010. The Rainwater Harvesting Mela event was therefore conceived with the purpose of making it easier for citizens to access service providers for rainwater harvesting.

Outputs

1. Spreading awareness on the importance of rainwater harvesting in Bangalore.
2. Providing a platform for citizens and government to interact.
3. Displaying 3D Models on Rainwater harvesting.
4. Showcasing posters on importance of rainwater harvesting.
5. Distributing handbook of all trained plumbers/contractors in Bangalore.
5. Display of different types of filters.
7. Rainwater harvesting helpdesk for citizens.
8. Promotion of India Water Portal.
9. Ask the expert service on India Water Portal.
10. H2S strip test bottles distributed.



www.arghyam.org

Arghyam

599, HAL 2nd Stage, Indiranagar
Bengaluru – 560008, Karnataka, India

Tel: + 91 80 41698942
Fax: + 91 80 41698943

Email: info@arghyam.org