WATER SOLUTIONS

Leveraging Impact Through Smart Philanthropy

CREDITS AND ACKNOWLEDGEMENTS

TABLE OF CONTENTS

PART 1: BACKGROUND

PART 2: INNOVATOR PROFILES

PART 1

BACKGROUND

NOTE FROM ROHINI NILEKANI

When, in 2005, we started our work on water through Arghyam, I had no idea that the problem I had identified as our sphere of work could race this far ahead of our capability to address it. A growing understanding has now placed WATER as the key resource for meaningful development.

For 15 years, we at Arghyam have worked, like many other philanthropists and organisations we know, to create some understanding and some impact, on issues related to water. We have had many successes, at both a practice and a policy level, thanks to the many amazing organisations we have had the opportunity to support.

But there is a huge gap between our response, and the response needed to address the real problems in the water sector.

Since then, the water crisis has snowballed to a magnitude that is truly shocking and this has brought us all together for this event.

Water, unlike a lot of other resources, is a common pool resource. While the total quantum of water that falls on India may be more or a less a constant, there is huge variability in access, quality and quantity. From our work, we have realised that the only sustainable way to work on these issues has been through participatory approaches that are scalable and contextualised to community - it is vital for water because water is a local and political issue. The other core principles of successful efforts have been the use of data and science to enable decision-making.

The numbers are worrisome. A common estimate is that India has spent over Rs 400,000 crores over the last several decades on surface water, yet India relies heavily on ground water. It is estimated that 70% of the water we get is contaminated due to untreated sewage and that the water table in half our wells is decreasing. It is estimated that India will fully utilise its groundwater resources by 2050 and India could experience a drop of 6% in GDP due to water scarcity alone.

The net per capita water availability per citizen has decreased from 5,177 cubic metres in 1951, to 3,800 cubic metres in 2001 and 3,500 cubic metres in 2011. And this reduction isn't equally distributed - transfers of water are usually from vulnerable to affluent populations - be it from agriculture to industry, rural to urban, from poor to rich or from livelihoods to lifestyles.

This is and will continue to be exacerbated by climate change. Climate change is here and needs to be recognised. 42% of India's land area has been under drought in 2019 due to failed monsoon.

Of course, climate change particularly affects vulnerable populations such as farmers without access to irrigation.

Many of our previous solutions have had unexpected failures: dams silted, rivers polluted, and groundwater depleted. But as private philanthropies, we have the freedom and responsibility to be innovative, eschew the fear of failure and take more risk. There is a need for private philanthropy to address ecosystem level gaps in India's water management including areas of scalability and replication, deepening engagement for community empowerment, bringing a lens of long-term sustainability, and, very importantly, creating spaces and an appetite for innovation.

Collaboration is hard - but the scale and speed of this problem can only be addressed together. We hope that this event can accelerate our individual efforts as well as set the stage for a new, co-created, journey that combines the collective knowledge and experience of water experts, innovators and private philanthropy to solve this problem at the scale and urgency it demands.

The goal of this Thematic is to share what we have learned of impactful solutions through the work of many organisations, including that of our partners. I hope you will discover many opportunities for more effective philanthropy through this meet!

Thank you so much for your participation.

Rohini Nilekani

INDIA'S WATER CHALLENGE

Designing for scale is critical to effective water management in India, where the problems far outpace solutions despite best efforts and innovations by the government, private sector and civil society. Home to 16% of the world's population, India has access to only 4% of the world's water resources, with 40% of water reserves unusable due to topographic constraints and distribution effects.[1] 162 million people in the country (80% of the rural population) lack access to safe water today, with research suggesting that demand will begin to outstrip supply by 2025 and resources will be fully utilised by 2050.[2] Apart from burgeoning demand, some of the most critical problems include regional disparities in access to safe water, groundwater depletion and contamination due to over-exploitation, inefficiencies particularly in irrigation use and supply which accounts for 89% of demand, large investment gaps despite increased government spending and a lack of community awareness.[3]

WATER SECURITY

- 21 Indian cities are likely to run out of groundwater by 2020[4], and India's water demand will be twice the available supply by 2030.[5]
- India is the largest extractor of groundwater, outpacing China and USA.[6]
- India could experience a drop of 6% in GDP due to water scarcity alone.[7]

WATER SAFETY

- 70% of India's water is contaminated, placing India at 120 out of 122 countries on the water management index.[8]
- An estimated 66 million people in India alone are suffering from fluorosis and over 500 million people in the Ganga-Meghna-Brahmaputra flood plains are exposed to arsenic.[9]

WATER ACCESS

- Access to water is inequitably distributed, with transfers from agricultural to industrial, rural to urban, and poor to rich communities.[10]
- RTIs show towns and cities in Maharashtra get 400% more water than villages in the state.

The existing solution space is not well-suited to scale or sustainability due to fragmented delivery, top-down solutioning and absence of effective first mile community engagement. Due to the importance of infrastructure funding and delivery, the government is a key actor, but its services are decentralised across 13 central ministries. Private sector funders and enterprises, as well as civil society organisations, play an increasingly important role in funding and implementation, from R&D and innovation, to plant and machinery, operations and maintenance, and delivery and community engagement. A 2014 sector review by Safe Water Network also highlighted the small but growing prevalence of community safe water solution units (CSWS) such as Water for People, Bala Vikasa and Sarvajal, which are partially or fully managed by local community members.[11] Initiatives such as Participatory Irrigation Management and the creation of Water User Associations (WUA) in Gujarat signal the government's recognition of community capacity building as a focus area.[12]

LANDSCAPE OF WATER SOLUTIONS IN INDIA

Water Value Chain	SOURCE Surface water Groundwater	SUPPLY Public Individual Private	USE Agricultural, Industrial, Domestic, Recreational and Environmental	DISCHARGE To Surface Water/Ocean, Consumed/ Evaporated, Recycled

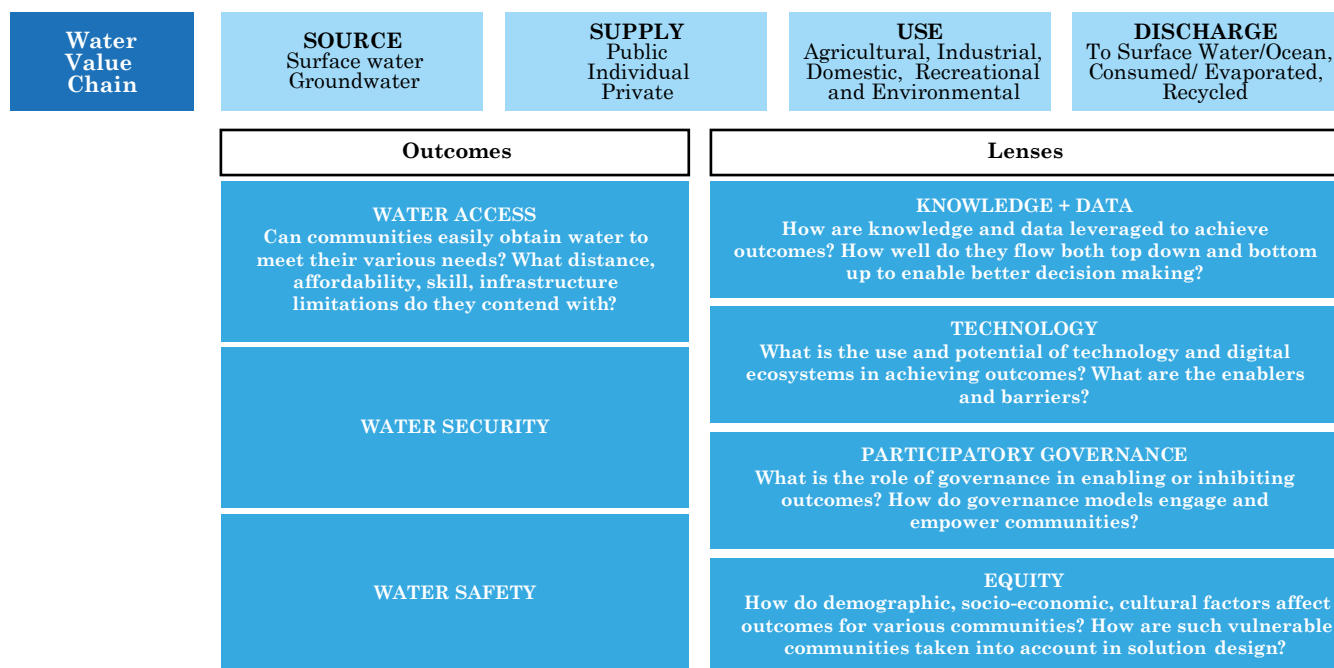| Outcomes	Lenses
WATER ACCESS Can communities easily obtain water to meet their various needs? What distance, affordability, skill, infrastructure limitations do they contend with?	**KNOWLEDGE + DATA** How are knowledge and data leveraged to achieve outcomes? How well do they flow both top down and bottom up to enable better decision making?
WATER SECURITY	**TECHNOLOGY** What is the use and potential of technology and digital ecosystems in achieving outcomes? What are the enablers and barriers?
	PARTICIPATORY GOVERNANCE What is the role of governance in enabling or inhibiting outcomes? How do governance models engage and empower communities?
WATER SAFETY	**EQUITY** How do demographic, socio-economic, cultural factors affect outcomes for various communities? How are such vulnerable communities taken into account in solution design?

Figure 1: Water Solutions Based on their Intervention Point in the Water Value Chain

Solutions to water challenges are diverse. The framework above helps organise water solutions based on their intervention point in the water value chain, the outcomes they aim to address, and the lenses applied to their solution approach.

Fundamentally, all water solutions address one of three outcome areas: access (ensuring communities can easily obtain the water they need), security (ensuring communities have sufficient and sustainable water supply through the year), and safety (ensuring the water made available is safe to consume). Solutions to achieve these outcomes are required all across the water value chain, from the point of source, to private and public supply mechanisms, for use of water for agricultural, industrial, domestic or environmental purposes, up to discharge or reuse of water.

Various actors come together to either directly provide, fund or enable different solutions. The figure below provides a snapshot of different types and examples of solutions, funders and ecosystem enablers operating in water today.

Focus Area	R&D and Innovation	Plant and Machinery	Operations and Maintenance	Delivery and Community Engagement

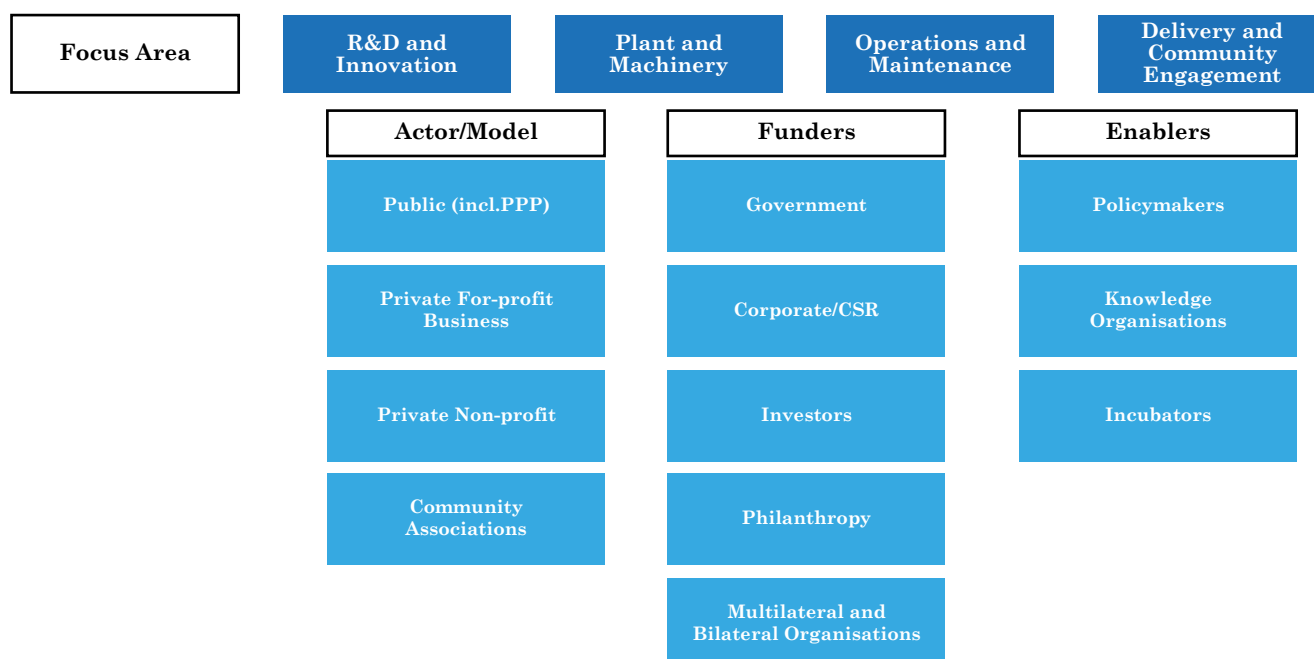| Actor/Model	Funders	Enablers
Public (incl.PPP)	Government	Policymakers
Private For-profit Business	Corporate/CSR	Knowledge Organisations
Private Non-profit	Investors	Incubators
Community Associations	Philanthropy	
	Multilateral and Bilateral Organisations	

Figure 2: Snapshot of Water Solutions, Funders and Enablers

EVENT CURATOR PROFILE: ARGHYAM

Arghyam was founded in 2005 to support sustainable water and sanitation solutions. It is a public charitable trust based in Bengaluru, whose work rests on a personal endowment from Rohini Nilekani.

Arghyam's mission is to strengthen the ability of the ecosystem to enable water security for 100 million people by 2023.[13] Over the last 14 years, Arghyam has expanded its presence in 22 states to address the issue of water security for vulnerable communities.

Arghyam's core belief is that its vision will be achieved by funding and partnering with like-minded individuals and organisations to design and implement transformative solutions.

To this end, Arghyam is driving a concerted water security agenda across India to catalyse collaborations for cross-learning and scale solutions to address water scarcity, safety and access in a digitally enabled ecosystem.

IMPACT AND FOOTPRINT [14]

15 years of work on water and sanitation

155 crores disbursed for 140 projects

22 states in over 110 districts

5 million people reached

1500+ para hydrogeologists

MILESTONES AND KEY TURNING POINTS IN JOURNEY [15]

2005-2008
Arghyam 1.0: "People"
- Funding promising people doing great work in water
- South India focus with large, known SPOs

2008-2011
Arghyam 2.0: "Projects"
- Funded disconnected, standalone projects
- Tested demonstrated technologies such as traditional water harvesting and well recharge
- Shift from supporting large to mid-size SPOs

2018 onwards
Arghyam 4.0: "Scale and Ecosystem Building"
- Focus on systemic challenges that are critical to scale any water solution
- Therefore, support for efforts that link data, knowledge, programmes and people

2011-2018
Arghyam 3.0: "Programmes"
- Began developing and supporting programmes on areas of high need and neglect
- Funded capacity building on a small scale
- Aimed to make the invisible visible, focusing on groundwater and areas of underinvestment

Arghyam focuses its support on water security, governance, quality, groundwater and sanitation and water data, through the India Water Portal. The following are examples of supported interventions in each focus area:

Water Security

- **Participatory Groundwater Management (PGWM)**. PGWM is a collaborative programme between Arghyam and its partner NGOs to build a suitable model for groundwater management through an aquifer-based, community-centric approach.[17]
- **Springs Initiative.** The Springs Initiative is an informal association of a diverse group of NGOs, government agencies and research organisations working in tandem on improving the practice of springs management, and ensuring drinking water security in areas dependent on springs. It aims to build a community of practitioners to inspire cross-learning and create a common platform for springs advocacy.[18]

Water Governance

- **The Forum for Policy Dialogue on Water Conflicts in India.** The forum is a network of 250 individuals and organisations who work together for the documentation, resolution and prevention of water conflicts in India. Its present focus is the Mahanadi basin to study environmental flow, agriculture and industrial water use and conflicts around groundwater.[19]
- **Gram Panchayat Organisation Development Initiative (GPOD)**. GPOD looks at building a sustainable model for community capacity building by strengthening Gram Panchayats as a self-governing body. By examining problems in water governance and service delivery, the GPOD is testing pragmatic solutions in Gram Panchayats of Karnataka.[20]

Water Quality

- **Fluoride Knowledge and Action Network.** Seeded by Arghyam and INREM, the network brings together organisations interested in finding solutions and improving awareness on the Fluorosis problem, by working on safe water and better nutrition.[21]
- **Arsenic Knowledge and Action Network.** The mandate of this network is bringing together knowledge and action driven by a dynamic network of partner organisations and individual members, sharing a common vision of bringing systematic and structural changes in arsenic mitigation strategies across India.[22]

Groundwater Sanitation Nexus Research

This programme aims at examining the linkages between groundwater and sanitation, including contamination pathways, current construction and management practices, and socio-economic drivers, among others.[23]

India Water Portal

Managed by Arghyam, India Water Portal is an open access platform to share knowledge and build communities around water and related issues in India. It has become a valuable archive of resources, working papers, reports, data, articles, news, events, opportunities and discussions on water. It has also become a place to share experiences and solutions, talk to water experts, and learn about the work that others are doing in sustainable water management in India.[24]

Urban WATSAN

Arghyam supported the Urban Initiatives Programme to develop a holistic approach for towns to improve and optimise sustainable management of water. The objective was to enable appropriate source to sink management of water. In all cases, they ensure equity in access is built into the system, through explicit pro-poor policy elements.

Rural Sanitation

Arghyam's sanitation programme concentrates on building knowledge and capacities of different stakeholders, conducts behaviour change campaigns, facilitates the use of technically appropriate options, enables sharing of experiences, and influences policy change.

In Arghyam's view, the following are 10 key challenges in water management in India today:

1

Resource Sustainability

Solutions focus more on water source than ensuring resource sustainability in the long term. Supply augmentation needs to be seen in conjunction with demand management, which entails behaviour change.

2

Privatised Common Pool Resources

Although groundwater is a common pool resource, it has been treated like private property in reality since the land on which wells are dug is privately held.

3

Decentralised Governance

The current water governance system reflects fractured mandates and a siloed approach. A lack of convergence on mission and outcomes is resulting in water scarcity.

4

First-Mile Capacity

There is an acute lack of community resource persons to tackle local issues at the first mile. Limited experts are in high demand, making efforts time and cost intensive.

5

Data Drought

The water data drought is as severe as drought itself. The sector lacks granular data to keep track of ground realities.

6

Inaccessible Community Capacity Building

Knowledge for community capacity building is not accessible. Building capacity for community resource persons is the key to sustained long-term impact.

7

Invisible Groundwater

Groundwater being invisible defies quantification and thus creates competition among users. Aquifer mapping though difficult, is critical for quantification and management of groundwater.

8

Implementation Challenges

Aquifers/ watersheds/ basins as the ideal units of management, do not match with the administrative units of a village/ block/ district, thus posing some challenges for their management.

9

Water Quality

The connection between water quality and groundwater use is poorly understood in areas of surplus as well as scarcity.

10

Unregulated Water Abstraction

Drinking water is not given due priority while unregulated water abstraction from natural resources for varied uses (irrigation, drinking, treatment, industrial application) leads to livelihood risk.

WHAT NEEDS TO BE DONE?
Insights from Arghyam's experience in water over a decade

Collaborative funding towards widespread water crisis in India demands active dialogue between knowledge resource centres, practitioners and philanthropic foundations to understand the core gaps in access, safety and security of water.

Philanthropy must engage with ecosystem level solutions to help streamline the entire vertical of actors including academia, policymakers, civil society organisations and the private sector.

GOVERNANCE AND POLICY

1. Role and Relevance of Governance and Policy on Access, Safety and Security Outcomes

- The lack of coordination between the States and the Centre is a glaring problem with a majority of policies not aligned to the needs of effective water management practices.[25]

- Given the current strain on water levels[26], the need of the hour is a governance architecture that looks at:
    - Efficient and effective delivery of services in urban and rural areas
    - Appropriate incentives for conservation of water and demand management
    - Convergence of various government departments[27]

- 70% of wastewater remains untreated due to lack of adequate infrastructure.[28] Government efforts in urban regional water planning are required to mitigate water risks related to public health.[29]

2. Key Barriers to Improved Outcomes

- There is an absence of institutions to sustain scientific decision-making for access, safety and security by collecting and analysing high quality data that is accessible, accurate and comprehensive in coverage.[30]

- Springs are often left out of mainstream conversations, policies and schemes on groundwater. There is a lack of knowledge, information and understanding of their characteristics as a source of groundwater.[31]

- Lack of legislative backing for water management frameworks prevents communities from participating in groundwater management.[32]

3. Possibilities for Action by Philanthropists

- Help scale holistic water solutions designed to simultaneously address water access, safety and security.[33]

- Support towards organisations working on policy and advocacy can help introduce government regulation of excessive water transfers from rural areas to industrial, urban and lifestyle sectors.[34]

- Strategic philanthropy towards societal platform opportunities can enable deeper dialogue between on-ground practitioners, funders, academicians and policymakers, building strong institutional links to empower local governance of water.[35]

COMMUNITY AND TECHNOLOGY

1. Role and Relevance of Community and Technology on Access, Safety and Security Outcomes

- Arghyam's experience on the ground has shown that the local community is the best guide to its local resources. Unless the community is prepared and empowered to understand and resolve their own local challenges, safe drinking water for all will remain at the theoretical level without a sense of reality or social complexities.

- Co-operation and awareness of sustainable practices are critical for communities to survive massive drought issues and lack of enough recharge for major sources.[36]

- Filtration technology and data support systems have been shown to create greater impact towards water safety in rural areas when they are community managed assets.[37]

2. Key Barriers to Improved Outcomes

- Conflicts at a village level caused by a high dependence on groundwater for drinking water supply pose a challenge to co-operative solutions and interventions in rural areas.[38]

- There is a lack of awareness on the difference between water source and water resource among communities. For instance, communities often believe that bore wells must be recharged, unaware that aquifers in the ground provide groundwater for the entire region.[39]

- Current technology solutions lack inputs from academicians and experts in the sector.

- Low-cost solutions are unable to scale, thus failing to reach large populations.

3. Possibilities for Action by Philanthropists

- Supporting solutions that help impart key hydrogeological skills to non-profits and rural practitioners can contribute towards decentralising water management in India.[40]

- Directing efforts towards under-invested areas such as community-centred solutions.

- Supporting demand side solutions around community-centred water security as policies are only focused on the supply side.[41]

PART 2

≈≈≈

INNOVATOR
PROFILES

OVERVIEW OF WATER INNOVATORS

This document profiles 24 of the many remarkable water solutions emerging in India. Each innovator has been chosen through a careful process of

shortlisting elaborated further below. Figure 3 below provides an overview of the work and geographical footprint of these solutions.

Event Theme X Intervention Point In Water Value Chain			Geographical Footprint

Event Theme / Point of Intervention	Community and Technology	Governance and Policy
Water source Groundwater, Surface Water Management	CHIRAG, Himalaya Seva Sangh	ACT, ACWADAM, AKRSP, BRLF, FES, SOPPECOM, ATREE
Water supply Distribution, Demand Management	Ambuja Cement Foundation, Bala Vikasa, Keystone Foundation, Naandi Community, Seva Mandir, WOTR	Development Alternatives, PRADAN, WASSAN
Water use Treatment, Rainwater Harvesting, Storm Water Drains, Disaster Management	Goonj, Drinkwell, People's Science Institute, PRASARI, Samerth Trust	
Waste water Discharge, Re-use	CDD	

Baseline Water Stress
- Low (<10%)
- Lo-Med (10-20%)
- Med-High (20-40%)
- High (40-90%)
- Ex. High (40-90%)
- Arid and Low Use

*Number = no. of orgs working in the state
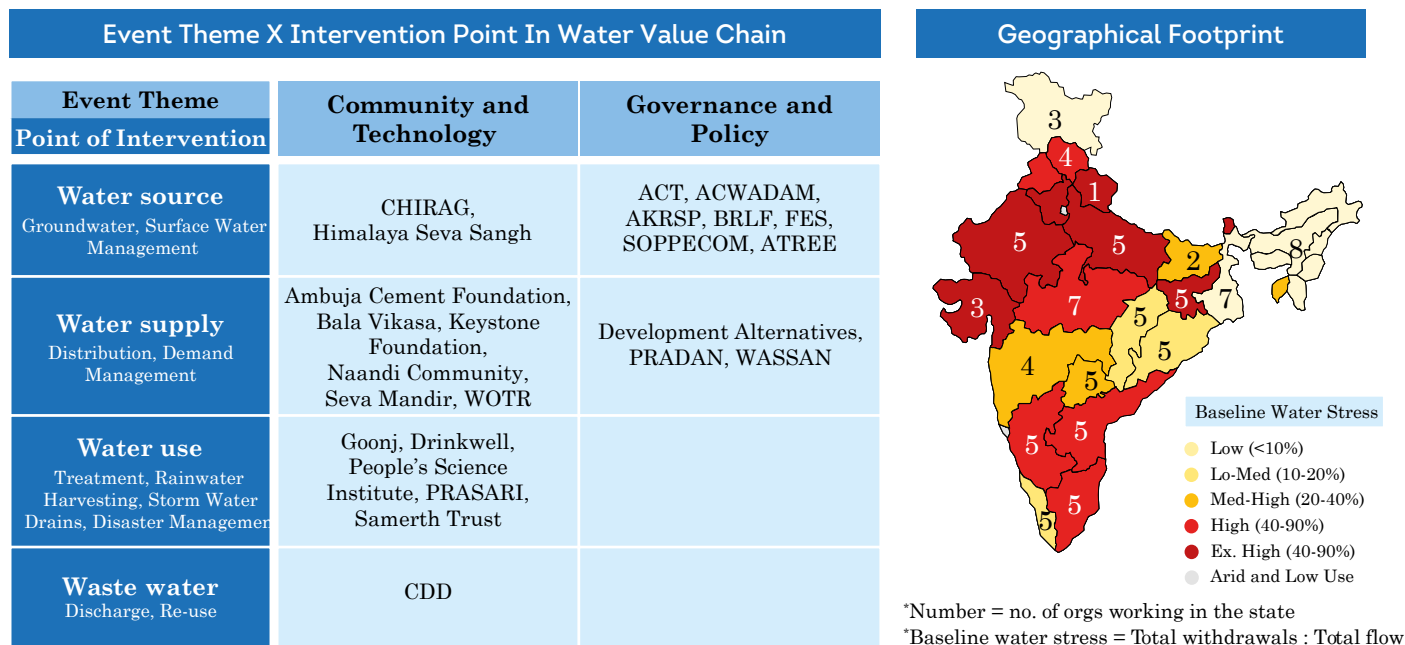*Baseline water stress = Total withdrawals : Total flow

Figure 3: Overview of 24 Water Innovators
Source: Sattva analysis, NITI Aayog Composite Water Management Index 2019
Note: Numbers on states indicate number of organisations working in each state, out of the 24. Baseline water stress is a ratio of total water withdrawals to total water flow.

Step 1: Discovery based on credibility and relevance to event theme

A long list of 139 organisations was created, all of which are members of the Fluoride Knowledge and Action Network, Arsenic Knowledge and Action Network, India Water Portal, and other such credible SPO databases. 57 of these organisations are working on solutions that fit the event themes of Community and Technology or Governance and Policy. Arghyam has had an association with 35 of these organisations in the past or present as a water funder.

Step 2: Ensuring a diverse spread of organisations

The 35 organisations were mapped against several criteria (intervention points in the value chain, geographical focus, operational model) to arrive at a desirable spread of organisations, representing a diversity of interventions, solution models, focus areas and geographies. Finally, the 35 organisations were scored on additional criteria (including organisational maturity, focus on water stressed regions, innovation, scale and strategic approach) in order to arrive at a list of 24 credible organisations.

Community and Technology Solutions in Water

~~~~~~

Ambuja Cement Foundation

Arid Communities and Technologies (ACT)

Bala Vikasa Social Service Society

Central Himalayan Rural Action Group (CHIRAG)

Consortium for DEWATS Dissemination (CDD) Society

Drinkwell Systems

Goonj

Himalaya Seva Sangh (HSS)

Keystone Foundation

Naandi Community Water Services Pvt. Ltd.

People's Science Institute

Rajarhat PRASARI

Samerth Trust

Seva Mandir

Watershed Organisation Trust (WOTR)

Ambuja Cement Foundation

FOUNDED: 1993

WEBSITE: http://www.ambujacementfoundation.org/

THEME Community and Technology

OUTCOMES Water Security

LEADERSHIP: Pearl Tiwari - Director & CEO

ANNUAL OPERATING BUDGET (2018-19): Over INR 100 cr

GEOGRAPHICAL REACH: Gujarat, Himachal Pradesh, Rajasthan, Maharashtra, Uttar Pradesh, Uttarakhand, Punjab, West Bengal, Chatthisgarh, Andhra Pradesh, Madhya Pradesh

Women in Rajasthan drawing water from a community pond revitalised by Ambuja Cement Foundation
Photo Courtesy: Ambuja Cement Foundation

COMMUNITIES REACHED

1. Farmers and local communities
2. Local organisations such as Water User Associations

ORGANISATION OVERVIEW

Ambuja Cement Foundation is a grassroots Corporate (Implementing) Foundation associated with the Lafarge Holcim group that harnesses the power of partnerships – between communities, government and other like-minded corporates and SPOs to help solve pressing community problems and to foster prosperity. In water, they create 'drought-resilient' rural villages and ensure all-year-round water for farmers, families and communities.

CHALLENGE

A majority of groundwater extracted in the country is used for agriculture. The biggest challenge faced is low water use efficiency. Due to lack of irrigation facilities and healthy water sources, farmers face challenges in crop management especially in states like Gujarat, Himachal Pradesh and Maharashtra. These are some of the highly water stressed regions with communities often unaware of the various methods through which they can tap into available water sources and install an efficient management system to maintain water security.

INTERVENTIONS

1. Water harvesting:
   a. ACF learns about various traditional water harvesting structures from the communities in order to make them functional, and invests in, and creates new structures.
   b.It takes the approach of interlinking rivers and water bodies to capture 'run off' so that it is not wasted, and harnessing old 'mined out' pits as large water storage facilities in water harvesting.

2. Drinking water:
   a.ACF educates rural families on the benefits of rainwater harvesting and provides technical support to help with installation
   b.It helps revive, build and maintain local drinking water sources, and works with the government to distribute water equitably throughout communities.

3. Water use efficiency:
   a.ACF works with farmers to promote, demonstrate and subsidise water management practices such as micro-irrigation techniques, and with organisations such as Water User Associations to ensure proper management and maintenance of each water source.

ACHIEVEMENTS AND IMPACT

- Water harvesting: 379 Check dams,1,404 wells recharged/built and 673 ponds constructed/renovated
- Drinking Water: 8,705 rooftop rainwater harvesting systems, 27,903 households covered by RO facilities and 294 drinking water distribution schemes
- Water Use Efficiency: 166 people's institutions and 8,295 hectares covered under micro-irrigation
- 11th National Award for Excellence in Water Management - Beyond the Fence Category - 2017
- FICCI CSR Award - 2016

PARTNERS AND FUNDERS

Water And Sanitation Management Organisation

TATA TRUSTS
Making A Sustainable Difference

For more information on partners, visit ACF here

Arid Communities and Technologies (ACT)

FOUNDED: 2004   **WEBSITE: http://act-india.org/**

THEME	Community and Technology		OUTCOMES	Water Security	

LEADERSHIP: Dr. Yogesh Jadeja – Director

ANNUAL OPERATING BUDGET (2018-19): Over INR 1 cr

GEOGRAPHICAL REACH: Gujarat (3 districts)

A pond in the village of Bayath, Kutch District which supplies water to 1600 cattle and 1800 human units
Photo Courtesy: Arid Communities and Technologies (ACT)

COMMUNITIES REACHED

1. Communities in arid and semi-arid regions
2. Individuals, institutions and communities working in the field of natural resources management

ORGANISATION OVERVIEW

ACT is a professional voluntary organisation based in Bhuj, Kachchh district, Gujarat. Founded by a group of like-minded young professionals interested in improving the quality of development delivery by government and Social Purpose Organisations (SPOs), it strives to strengthen livelihoods in arid and semi-arid regions by improving access to technological and institutional solutions in collaboration with communities with the objective of resolving ecological constraints. ACT works primarily in groundwater management and urban watershed management.

CHALLENGE

In Gujarat, all the aquifer systems are under stress of exploitation and have depleting water levels and deteriorating water quality. The monitoring of these aquifers at taluka/block level has several limitations and does not provide a correct assessment of groundwater. The inability of the state to gain a comprehensive and accurate understanding of their groundwater has resulted in competing interests of various stakeholders like agriculture and industries to exploit the situation. As a clear and simple scientific tool has not been developed for each aquifer, legislation has been difficult.

In order to achieve these objectives, the approach used by ACT is to elicit the contribution of local communities, SPOs, policy makers and the scientific community at large.

INTERVENTIONS

1. In groundwater management, ACT works to achieve the following outcomes:
   a. To develop a scientific understanding of a major aquifer of Gujarat/Kachchh.
   b. Multiple stakeholders sharing an aquifer are able to demonstrate an equitable and sustainable sharing mechanism based on scientific appreciation of the geo-hydrology.

2. In urban watershed management, ACT is looking to demonstrate various activities in the areas of decentralised drinking water management, stormwater management, groundwater recharge through abandoned bore wells, groundwater studies, etc. ACT proposes activities such as implementation of drinking water schemes, awareness, information dissemination, study research and advocacy either individually or in collaboration with CBOs and Bhuj municipality.

ACHIEVEMENTS AND IMPACT

- 30,000 lives impacted
- Built a cadre of Bhujal Jankaars (Hindi word meaning '*groundwater informed*')
- Jalstar Award by Divyabhaskar Group
- Appointment as an Advisory Member in District Watershed Programme Management
- Appointment as Working Group Member for 'Sustainable Groundwater Management for Twelfth Five-Year Planning'

PARTNERS AND FUNDERS

For more information on partners, visit ACT here.

Bala Vikasa Social Service Society

FOUNDED: 1991	WEBSITE: http://www.sopar-balavikasa.org/

THEME	Community and Technology		OUTCOMES	Water Access Safety & Security	

LEADERSHIP: Shoury Reddy – Executive Director

ANNUAL OPERATING BUDGET (2018-19): Over INR 10 cr

GEOGRAPHICAL REACH: Telangana (30 districts), Andhra Pradesh (10 districts), Maharashtra (5 districts), Karnataka (1 district) and Chhattisgarh (2 districts)

A community borewell
Photo Courtesy: Bala Vikasa Social Service Society

COMMUNITIES REACHED

Poor communities, particularly women

ORGANISATION OVERVIEW

Bala Vikasa is a non-profit organisation founded in 1991 by Bala Theresa and André Gingras with the mission to support and strengthen the development process of India's poor communities, particularly in Andhra Pradesh and Telangana.

In addition to community-driven development programs, Bala Vikasa is involved in building the capacities of development professionals, entrepreneurs and the corporate sector in best practices of sustainable development.

CHALLENGE

Water contamination is one of the main problems identified by Bala Vikasa. Water in many parts of Telangana and Andhra Pradesh is often excessively high in fluoride. This causes fluorosis and related health problems in these regions along with making important sources like groundwater unfit for drinking. The problem for rural communities is both at the level of access and safety as aquifers are depleting and getting contaminated by various anthropogenic sources including agriculture.

INTERVENTIONS

1. Borewells: The borewell program aims to make water accessible to rural families who would otherwise have to walk long distances to collect water.
2. Water purification systems: The water purification programme directly engages communities in the project management process while providing the poorest with a new system to help improve their drinking water. The construction of a purification system uses Reverse Osmosis technology to remove excess fluoride and other unwanted impurities (such as chlorine, lead, and sodium) from the water.
3. Construction of family toilets: Through the women programme, rural women and youth learn about the ill-effects of open defecation and how better sanitation systems enhance health and hygiene. Family toilets are constructed by the community while Bala Vikasa supplies construction materials. Once the toilet has been built, they conduct awareness trainings on the importance of good hygiene and the proper use and maintenance of toilets.

Bala Vikasa uses a 360° community-driven development approach. Villagers who wish to receive a bore well, purification system or family toilet must apply and commit to its upkeep and proper use. Cash and kind contributions are mandatory to create a sense of ownership.

ACHIEVEMENTS AND IMPACT

- 35,00,000 lives impacted
- IICA Award for Best Model for Corporate Social Responsibility in India

PARTNERS AND FUNDERS

Government of Canada

Manos Unidas

FRANKLIN TEMPLETON INVESTMENTS

CII
Confederation of Indian Industry

For more information on partners, visit Bala Vikasa here

Central Himalayan Rural Action Group (CHIRAG)

FOUNDED: 1986   **WEBSITE: http://chirag.org/**

THEME	Community and Technology		OUTCOMES	Water Access Safety & Security	

LEADERSHIP: Dr. Badrish Mehra - Executive Director

ANNUAL OPERATING BUDGET (2018-19): Less than INR 10 cr

GEOGRAPHICAL REACH: Uttarakhand (5 districts), Himachal Pradesh (1 district)

Water being filled at its source
Photo Courtesy: Central Himalayan Rural Action Group (CHIRAG)

COMMUNITIES REACHED

1. Local communities in Kumaun
2. Grassroot Development Organisations working in watershed development

ORGANISATION OVERVIEW

CHIRAG is a rural development organisation based in the Kumaun region of Uttarakhand in India. Since 1986, they have worked closely with communities to improve their quality of life.

CHALLENGE

Development and human activity have had a significant impact on the ecosystem of Uttarakhand. The socio-economic, cultural and environmental backdrop of the region is changing - natural springs are drying up, the rainfall pattern is erratic and monsoon is delayed, all of which contribute to a growing drinking water crisis. Migration to urban areas is increasing due to a lack of interest in agriculture and horticulture.

The water crisis in Kumaun is one of decreasing availability, deteriorating quality and poor governance, which results in conflicts on water availability.

INTERVENTIONS

1. Spring recharge: CHIRAG has treated and monitored 211 springs in 16 blocks spread over 8 districts of Kumaun and Garhwal regions of Uttarakhand. Two watersheds have been instrumented in Nainital and Almora districts. With technical support on geology from ACWADAM Pune, it addressed water recharge in springs.

2. Watershed development: CHIRAG's work under the watershed development programme encompasses a range of interventions, including forestry, fodder, soil and water conservation, agriculture, drinking water supply and livelihoods.

ACHIEVEMENTS AND IMPACT

- 2,50,000 lives impacted
- Manthan Award - 2010

PARTNERS AND FUNDERS

For more information on partners, visit CHIRAG here

Consortium for DEWATS Dissemination (CDD) Society

FOUNDED: 2005	WEBSITE: https://www.cddindia.org/

THEME	Community and Technology		OUTCOMES	Water Safety & Security	

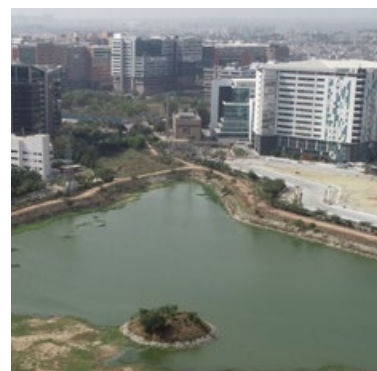LEADERSHIP: Ganapathy P.G. - Director, Programmes

ANNUAL OPERATING BUDGET (2018-19): Over INR 10 cr

GEOGRAPHICAL REACH: Multiple districts across Karnataka, Tamil Nadu, Kerala, Telangana, Andhra Pradesh, Rajasthan, Maharashtra, Jharkhand, Bihar and Odisha

COMMUNITIES REACHED

Urban and peri-urban populations

Mahadevapura Lake, Bengaluru
Photo Courtesy: CDD Society

ORGANISATION OVERVIEW

CDD Society is a sanitation and water focused not-for-profit organisation registered in 2005. CDD Society's vision is to help create healthy and happy communities, across the world, by ensuring a clean and sustainable environment around them. This is achieved through innovating, demonstrating and disseminating decentralised nature-based solutions for the conservation, collection, treatment and reuse of water resources and management of sanitation facilities. It believes in scaling impact through collaborations with government and non-government agencies, communities and other stakeholders in the water and sanitation ecosystem.

CHALLENGE

One of the key ingredients required to address the challenge of better management of environment resources is the availability of affordable and sustainable water and sanitation solutions that can be accepted and adopted by local communities. These solutions need to be built on - naturally available local resources, low short-term and long-term costs of setup and maintenance, community ownership, and people's participation in nurturing and preserving water resources. These solutions need to have a systems approach and require contextualised innovation that can take into account the many social, economic, political and environmental aspects affecting them and thus, close the loop for all water and sanitation related issues at smaller scales.

INTERVENTIONS

1. Wastewater treatment: Solution design and implementation support for nature-based wastewater treatment solutions that close the loop at smaller scales - like households, communities and also in remediation of water bodies.

2. Waterbody rejuvenation: Bringing in a systems approach and utilising our experience and skills in decentralised wastewater treatment to not only avoid waterbody pollution but also to revive the surrounding eco-system so as to provide a nature-based, long-term, low maintenance solution.

3. Capacity building: Design and deliver trainings for diverse stakeholder groups, especially practitioners and decision makers and build their capacities to implement solutions.

ACHIEVEMENTS AND IMPACT

- 3,00,000+ lives impacted
- Spirit of Humanity Award by Americares India - 2018

PARTNERS AND FUNDERS

BILL & MELINDA GATES foundation · giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH · BORDA · BMZ Federal Ministry for Economic Cooperation and Development · ORACLE

For more information on partners, visit CDD here

Drinkwell Systems

FOUNDED: 2015   **WEBSITE: http://drinkwellsystems.com/**

| THEME | Community and Technology | | OUTCOMES | Water Access & Safety | |

LEADERSHIP: Minhaj Chowdhury – CEO, Co-founder

ANNUAL OPERATING BUDGET (2018-19): Over INR 1 cr

GEOGRAPHICAL REACH: West Bengal (4 districts), Uttar Pradesh (1 district), Bihar (2 districts), Jharkhand (1 district), Madhya Pradesh (1 district), Assam (1 district)

A water user in Bangladesh
Photo Courtesy: Drinkwell Systems

COMMUNITIES REACHED

1. Low-income communities
2. Rural and peri-urban communities

ORGANISATION OVERVIEW

Drinkwell is a technology-driven social enterprise that powers water infrastructure. Organisations across the water ecosystem - from small SPOs to public utilities - use their technology to treat water and maintain assets.

Their systems-based approach involves three steps:
1. Selecting organisations who have the social capital and business acumen to provide safe drinking water in their communities
2. Building low-cost, high-efficiency water filtration systems for entrepreneurs to operate as sustainable enterprises
3. Service systems by providing critical support around maintenance, financial management, and quality assurance

CHALLENGE

90% of the rural population in India drinks untreated water and 100 million Indians live in areas of poor water quality. With no access to efficient water filtration technology, low-income communities in India are highly vulnerable to water-borne diseases. Arsenic and fluoride have entered groundwater in large quantities, which leaves no alternative source to the already polluted surface water bodies. Accessible technologies are needed urgently to address and treat this crisis.

INTERVENTIONS

1. HIX resins: Drinkwell's Hybrid Ion Exchange (HIX), a patented nanotechnology-based resin platform is capable of removing arsenic and fluoride from water.
2. Water ATMs: Drinkwell provides single and multi-tap ATM dispensing systems which reduce cash leakage at safe water points through RFID-enabled money management and metered dispensing.
3. Systems design: They provide system design schematics, as well as an overview of the multiple touchpoints that occur during a system operation and maintenance.
4. Operation and maintenance: Utilities, SPOs, development agencies, and governments have entrusted Drinkwell with operating and maintaining their water assets.

ACHIEVEMENTS AND IMPACT

- 3,05,000 lives impacted
- Technology provider for the world's largest piped arsenic and iron removal water system in West Bengal
- Exclusive license for HIX Nano
- Unilever Transform Award - 2018

PARTNERS AND FUNDERS

For more information on partners, visit
DRINKWELL SYSTEMS here

Goonj

FOUNDED: 1999   **WEBSITE: https://goonj.org/**

| THEME | Community and Technology | | OUTCOMES | Water Safety & Security | |

LEADERSHIP: Anshu Gupta - Founder

ANNUAL OPERATING BUDGET (2018-19): Over INR 20 cr

GEOGRAPHICAL REACH: : Uttarakhand, Jammu and Kashmir, Delhi, Punjab, Rajasthan, Uttar Pradesh, Madhya Pradesh, Bihar, West Bengal, Odisha, Chhattisgarh, Jharkhand, Assam, Nagaland, Mizoram, Maharashtra, Andhra Pradesh, Karnataka, Kerala, Tamil Nadu, Telangana, Goa, Haryana, Himachal Pradesh, Gujarat

The community of Kashmir cleaning the Dal Lake post floods
Photo Courtesy: Goonj

COMMUNITIES REACHED

1. Rural, low-income and tribal communities in remote villages
2. Children and women belonging to low-income families
3. Disaster-affected communities

ORGANISATION OVERVIEW

Goonj is a non-profit working pan-India on rural development, poverty alleviation, disaster relief and rehabilitation, and education using urban surplus material as a powerful tool and parallel currency for rural development work across regions in India. Goonj mobilises and motivates rural communities to self-identify their issues and work on them with their own efforts, resources and local wisdom. Urban material kits are given as a reward for their efforts, replacing charity with dignity in development work. After disasters, Goonj mobilises and motivates affected communities to revive and rebuild their damaged infrastructure and receive basic needs material as reward.

CHALLENGE

A vast majority of people across nine states of India (including Maharashtra, Madhya Pradesh, Punjab, Kerala, Karnataka, Assam, Andhra Pradesh and Bihar) are grappling with floods right now. Water bodies are typically the lifelines of these communities – whether it is Kerala backwaters or Odisha ponds. However, water bodies are also degrading in quality as urbanisation and climate change increase with time. Climate change has dried up several water bodies in central tribal regions and communities need extensive support for well-digging and revival of resources. Disasters further render them unusable, increasing the vulnerability of the disaster-hit communities.

INTERVENTIONS

1. Rahat: Goonj's 'Rahat' initiative is about a systematic relief and rehabilitation approach and work in large-scale disaster across India. Goonj has also turned massive disaster wastage into resource for development work after massive disasters like the Tsunami of 2008, Bihar Floods, Andhra Pradesh Floods and more recently after the 2018 Kerala Floods.

2. Revival, repair and building of rural traditional water bodies programmes through local community engagement: Every year, pan-India, Goonj takes up hundreds of water related projects with village communities. With disaster-hit communities, Goonj especially focuses on reviving, repairing and building their water bodies to ensure they get back to their livelihood.

ACHIEVEMENTS AND IMPACT

- About 40,00,000 lives impacted annually
- Ramon Magsaysay Award 2015 to Anshu Gupta, Founder of Goonj
- Ashoka and Schwab Fellowship for Anshu Gupta
- World Bank's Global Development Marketplace Award - 2009
- Listed by Forbes Magazine as India's Most Powerful Rural Entrepreneur - 2010

PARTNERS AND FUNDERS

For more information on partners, visit GOONJ here

Himalaya Seva Sangh (HSS)

FOUNDED: 1970   **WEBSITE: http://www.himalayanwater.org/**

THEME	Community and Technology		OUTCOMES	Water Access & Security	

LEADERSHIP: Manoj Pande - Secretary

ANNUAL OPERATING BUDGET (2018-19): Less than INR 1 cr

GEOGRAPHICAL REACH: Uttarakhand, Jammu & Kashmir

A workcamp for Chaal rejuvenation
Photo Courtesy: Himalaya Seva Sangh

COMMUNITIES REACHED

1. Local women's groups
2. Local youth groups

ORGANISATION OVERVIEW

Earlier known as the Border Areas Coordination Committee, the Himalaya Seva Sangh was set up by a number of Gandhian organisations in 1962. From 1970, it began functioning as an autonomous organisation with the objectives of promoting community action for social and economic development in the Himalayan region and to guide, coordinate and promote the activities of voluntary organisations and individual social workers working for socio-economic upliftment of the people of the region.

CHALLENGE

The hilly Himalayan region is blessed with adequately high rainfall but an overwhelmingly high proportion of it is restricted to the monsoon season. Paucity of water during non-monsoon months coupled with high rates of surface run-off cause heavy land degradation and erosion. Overwhelmingly, large proportions of the agricultural fields are dependent upon rains alone.

With increasing population, changing lifestyles and growing commercial activities, mountainous regions are facing a shortage of water. In river valleys too, potable water is not available in abundance as the river discharge is laden with huge volumes of silt and mud both during summers due to glacial melting and monsoons due to surface erosion.

INTERVENTIONS

1. Slow sand filter: Slow sand filter is an innovation to make clean water available to the masses at a reasonable cost. It works without any external energy source utilising the gravitational gradient and supplies potable water at a rate of 6 litres per minute.
2. Rainwater harvesting: The topography of the hills promotes quick runoff where water could be productively used. A large number of ferro-cement tanks of a capacity of around 4,000 litres have been constructed in the region for the collection of rooftop rainwater runoff.
3. Recharge zone management: Recharge pits or small water ponds (*Chaals*) have been constructed by HSS. They have also engaged in extensive afforestation of springs, facilitation of undergrowth and construction of physical hurdles for the flow of water in recharge zones.

ACHIEVEMENTS AND IMPACT

- 10,000 lives impacted

PARTNERS AND FUNDERS

Keystone Foundation

THEME	Community and Technology		OUTCOMES	Water Access Safety & Security	

LEADERSHIP: Snehlata Nath - Founder and Director

ANNUAL OPERATING BUDGET (2018-19): Over INR 10 cr

GEOGRAPHICAL REACH: Tamil Nadu (3 districts), Kerala (2 districts), Karnataka (1 district), Chhattisgarh, Odisha, Madhya Pradesh

COMMUNITIES REACHED

1. Local communities in the Nilgiris region
2. Indigenous communities

Water monitoring
Photo Courtesy: Keystone Foundation

ORGANISATION OVERVIEW

Keystone Foundation is a non-profit Trust, established in 1993 to work with indigenous and marginalised, poor communities on conservation, enterprise and livelihoods and environmental governance. Their approach is defined by "eco-development", an approach that uses ecologically sound practices, and designs to development.

CHALLENGE

The region's rivers and wetlands are under threat today. Faced with an alarming scenario, Keystone felt an urgent need to work on the aspects of water management, protection of resources and increasing awareness amongst dependent communities. Maintaining pristine waters continues to be at the heart of the organisation.

Keystone has worked on a number of projects that have intervened to improve access to water for local communities, increase the knowledge base on water resources in the Nilgiris and provide inputs to advocacy for the conservation of hill wetlands and other water resources.

INTERVENTIONS

1. Periodic monitoring of quantity and quality of water.
2. Eco-restoration of springsheds of wetland catchments.
3. Strengthening cultural ties to springs and wetlands and documentation of culture and knowledge pertaining to water resources.
4. Increasing awareness of culture and traditions around water among all stakeholders.
5. Revival of springs and wetlands going hand-in-hand with renewal of traditional practices.
6. Nilgiris Water Portal: A platform with data, information and knowledge from Keystone's work to help support sustainable water resource management.

ACHIEVEMENTS AND IMPACT

- 2,00,000 lives impacted
- Jamnalal Bajaj Foundation Award in Application of Science & Technology in Rural Areas - 2013
- Nari Shakti Award by Ministry of Women & Child Development - 2019

PARTNERS AND FUNDERS

For more information on partners, visit
KEYSTONE FOUNDATION here

Naandi Community Water Services Pvt. Ltd.

FOUNDED: 2010	WEBSITE: http://www.naandi.org/naandi-community-water-services-ltd/

THEME	Community and Technology		OUTCOMES	Water Safety & Security	

LEADERSHIP: Manoj Kumar - Founding CEO

ANNUAL OPERATING BUDGET (2018-19): Less than 10 cr

GEOGRAPHICAL REACH: Rajasthan (2 districts), Haryana (6 districts), Maharashtra (3 districts), Telangana (7 districts), Andhra Pradesh (7 districts), Karnataka (6 districts)

NCWS' school water programme
Photo Courtesy: Naandi Community Water Services Pvt. Ltd. (NCWS)

COMMUNITIES REACHED

Local communities with no access to safe drinking water

ORGANISATION OVERVIEW

In 2010, Naandi Foundation's safe drinking water initiative established itself as a social enterprise – the Naandi Community Water Services Ltd. (NCWS). It is one of India's largest community-based drinking water solutions providers working to provide access to safe drinking water in a sustainable manner.

CHALLENGE

While the technologies to purify water have always existed, India has the largest number of individuals without access to safe drinking water globally – 75.8 million. The missing link seemed to be the lack of a proven sustainable service delivery model.

INTERVENTIONS

1. Safe drinking water: Naandi Community Water Services Ltd. works with village bodies and the community to give them clean drinking water at a nominal user fee (between 10 to 20 paise per litre). Through a nation-wide network of technical and operational experts, NCWS installs and operates a network of decentralised Community Water Centres (CWCs) in regions where the current sources of drinking water are contaminated and unfit for consumption.

2. On the impact front, NCWS focuses on behaviour change through community engagement to create a long-term and sustainable impact. It engages with the community through information, education and communication activities to bring about positive and sustainable behaviour towards WASH.

ACHIEVEMENTS AND IMPACT

- 7,57,000 lives impacted
- More than 400 water purification centres operating across Punjab, Haryana, Rajasthan, Andhra Pradesh, Telangana and Karnataka
- Since 2010, no plant has received a complaint regarding water quality or supply
- SEED Transformation Program - Stanford Graduate School of Business - 2018

PARTNERS AND FUNDERS

People's Science Institute

THEME: Community and Technology

OUTCOMES: Water Access Safety & Security

LEADERSHIP: Dr. Debashish Sen - Director

ANNUAL OPERATING BUDGET (2018-19): Less than INR 10 cr

GEOGRAPHICAL REACH: Arunachal Pradesh (4 districts), Himachal Pradesh (1 district), Jharkhand (1 district), Madhya Pradesh (2 districts), Maharashtra (1 district), Manipur (2 districts), Meghalaya, Nagaland (7 districts), Mizoram (1 district), Odisha (1 district), Tripura (1 district), Rajasthan (1 district), Uttarakhand (8 districts), Uttar Pradesh (1 district), West Bengal (2 districts)

A woman farmer comparing panicles of System of Rice Intensification (SRI) crop with those of conventionally grown rice crops *Photo Courtesy: People's Science Institute, Dehradun*

COMMUNITIES REACHED

Communities in the Himalayan and Bundelkhand regions

ORGANISATION OVERVIEW

People's Science Institute (PSI) was established as a non-profit research and development organisation in 1988. It provides technical and managerial support to communities and organisations, implements development programmes and undertakes public interest research.

The institute is known for its pioneering work in the fields of community-led watershed-based livelihoods development, environmental quality monitoring, disaster-safe housing and dissemination of appropriate technologies.

CHALLENGE

Communities in the Himalayan and Bundelkhand regions are not resilient to the effects of natural disasters like floods and droughts. They often lose access to basic necessities, including food security post the disaster.

The scope for intensive resource-based development in Uttarakhand and Himachal Pradesh is limited. In the mountain villages, farm holdings are usually small, about 0.4 ha (1 acre) per family and rice productivity varies from about 1-2 tonnes/ha on unirrigated fields to 2-3 tonnes/ha on irrigated ones. This fails to sustain families for the entire year.

INTERVENTIONS

1. Natural resource management: PSI engages in implementing community-led natural resources development projects, providing training in participatory watershed development activities, undertaking studies on hydrology, environmental impact of large dam projects, and traditions of water management, developing and diffusing appropriate technologies, and undertaking policy research and analysis.

2. Environmental quality monitoring: PSI tests water quality and undertakes fluorosis mitigation activities.

3. Disaster mitigation and response: It also undertakes research into the nature, causes and impact of disasters, and mobilises the community for post-disaster rehabilitation.

ACHIEVEMENTS AND IMPACT

- 40,736 lives impacted
- Appreciation of Outstanding Contribution for Inventing People-Centred and Locally Appropriate Solutions for Water Quality Mitigation by Water Aid and UNICEF - 2008

PARTNERS AND FUNDERS

Rajarhat PRASARI

FOUNDED: 2004

WEBSITE: http://www.prasari.org/

THEME	Community and Technology		OUTCOMES	Water Access & Security	

LEADERSHIP: Saikat Pal - Secretary

ANNUAL OPERATING BUDGET (2018-19): Less than INR 1 cr

GEOGRAPHICAL REACH: West Bengal (5-6 districts)

A five-square water harvesting structure in Korakati
Photo Courtesy: PRASARI

COMMUNITIES REACHED

Women members of SHGs in West Bengal

ORGANISATION OVERVIEW

Rajarhat PRASARI is a non-profit organisation established in 2007 and led by professionals working with rural families towards securing their livelihood and wellbeing. PRASARI works with over 19,000 rural families across a range of agro-climatic regions in West Bengal, India, through its field-based teams of professionals.

CHALLENGE

The Sundarbans are plagued by two critical issues, namely water logging and soil salinity. As a result, the region suffers from low land productivity, cropping intensity and return from agri-fisheries. This puts the livelihood of small and marginal farmers at stake and forces them to migrate.

Additionally, the Himalayan region is facing a water crisis due to erratic patterns of rainfall, increased anthropogenic activities around the spring recharge zones, and rapid urbanisation. These dynamic changes are gradually shifting the groundwater balance and the discharge of natural springs.

INTERVENTIONS

1. Water security: PRASARI has worked on creating rainwater harvesting structures, shaping/raising the land bed, and strengthening field bunds with the excavated soil, thus ensuring easy drainage to counter the waterlogged situation. It has reduced the salinity through integration of kharif rice, and residual mainland moisture use through mustard as a second crop. It has also worked on ensuring additional income from improved carp and prawn culture in water harvesting tanks.

2. Springshed management: Through the 'Jharnadhara' programme initiated by the Government of West Bengal, PRASARI capacitated the Gorkhaland Territorial Administration (GTA) resource persons, local spring volunteers (Dhara Sevaks), Gram Panchayat and Block resource persons on springshed management.

ACHIEVEMENTS AND IMPACT

- 1,65,000 lives impacted
- Five-Square Model adopted by the government

PARTNERS AND FUNDERS

Samerth Charitable Trust

FOUNDED: 1992

WEBSITE: http://samerth.org/

THEME	Community and Technology		OUTCOMES	Water Access, Safety & Security	

LEADERSHIP: Gazala Paul – Managing Trustee

ANNUAL OPERATING BUDGET (2018-19): Over INR 1 cr

GEOGRAPHICAL REACH: Gujarat (2 districts), Chhattisgarh (5 districts)

A cattle trough at Dhabda
Photo Courtesy: Samerth Charitable Trust

COMMUNITIES REACHED

1. Indigeneous tribes of Achanakmar region of Chhattisgarh
2. Marginalised communities like Koli tribe, Rabaris, Bharward and other communities dependent on rainfed agriculture in Kutch District of Gujarat

ORGANISATION OVERVIEW

Samerth is an Indian non-profit development organisation that has helped in creating an environment to strengthen Panchayati Raj. With respect to water, it is highly focused on helping indigenous and tribal communities gain access to their economic and social rights.

CHALLENGE

The Panchayat Raj institution lacks a strong water security plan to engage in areas of health, sanitation and water distribution. These activities need huge investment from government and other private donors. The interventions are capital intensive. The community and the elected members have to play a crucial role in sustainability by maintaining records, a transparent system of managing finance, and accountability to the village community.

The impact of climate change is largely felt by vulnerable populations. Due to the location of their habitats, they are largely excluded from government services and any form of protection of resources.

INTERVENTIONS

1. Water conservation programme
   The organisation built rainwater harvesting structures in the water-scarce region of Kutch District by leveraging funds from various stakeholders and schemes like MGNREGA and created a local water federation at the block level.

2. Science-based water security planning
   The organisation engages in skilling of last-mile service providers- building capacity within the organisation community, and prepares water security plans that involve aspects of hydrogeology, water augmentation and water balance.

ACHIEVEMENTS AND IMPACT

- 1,00,000 lives impacted
- Honoured by District of Kutch for constructing 1600 sanitation units in Nakhtrana - 2015
- Phoenix Leading Lady Award - 2019

PARTNERS AND FUNDERS

Seva Mandir

FOUNDED: 1968

WEBSITE: http://www.sevamandir.org/

THEME Community and Technology

OUTCOMES Water Access, Safety & Security

LEADERSHIP: Ronak Shah - Chief Executive

ANNUAL OPERATING BUDGET (2018-19): Less than INR 50 Cr

GEOGRAPHICAL REACH: Rajasthan (2 districts)

An EcoSan toilet
Photo Courtesy: Seva Mandir

COMMUNITIES REACHED

1. Rural women
2. Farmers for watershed programmes
3. Marginalised tribal communities

ORGANISATION OVERVIEW

Seva Mandir works across 1300 villages in Southern Rajastan, where over 87% of the population rely on agriculture and people live on less than INR 20 a day. It uses every development project as a way to build stronger communities. For over 50 years, Seva Mandir has worked in partnership with these people, not only to improve their material well-being, but to build stronger and more ethical communities through its programmes on governance, health, education, sustainable use of natural resources, women's empowerment, youth development, child care and social enterprise.

CHALLENGE

Farmers must cope with a desert climate, erosion-prone hills, and irrigation on just 20% of productive land. In this context, conserving water can make or break livelihoods. Moreover, one of the major causes of the high prevalence of water-borne diseases amongst people in the rural parts of the region is lack of access to clean drinking water. Annually, around 40-70% of families in the region are affected by water-borne diseases. Accessing drinking water is still a major problem for most families in the region, with women in particular suffering the drudgery of collecting water for household consumption.

INTERVENTIONS

1. Clean drinking water systems
   a. Seva Mandir uses decentralised technology transfer suited to the region's climate, hilly terrain, dispersed settlement pattern, socio-economic realities and needs of the families.
   b. To provide clean drinking water to a village, Seva Mandir works in tandem with village institutions. Community participation is ensured in planning, decision making, resource contribution, construction, operation, maintenance and management systems, and norm setting.
   c. Seva Mandir works primarily with women's groups to ensure the management of the water systems, and they act as the primary water-user group. The role of these women is to collect a nominal monthly fee from each beneficiary family to create a management fund which is then used to buy chlorine to eliminate bacterial contamination in the tank and meet the expense of regular repair and maintenance.

2. ECOSAN - Ecological sanitation and gap filling work in sanitation facilities
   To ensure access and appropriate design, Seva Mandir works through community institutions which identify families who need access to toilets in a village. With Seva Mandir's technical support, the community decides on the type of the toilet to be installed.

ACHIEVEMENTS AND IMPACT

- 5,00,000 lives impacted

PARTNERS AND FUNDERS

For more information on partners, visit SEVA MANDIR here

Watershed Organisation Trust (WOTR)

FOUNDED: 1993 **WEBSITE: https://www.wotr.org/**

| THEME | Community and Technology | | OUTCOMES | Water, Food & Income Security | |

LEADERSHIP: Prakash Keskar – Executive Director

ANNUAL OPERATING BUDGET (2018-19): INR 40 cr

GEOGRAPHICAL REACH: 34 districts of India- Maharashtra (12), Telangana (4), Andhra Pradesh (1), Madhya Pradesh (6), Rajasthan (5), Jharkhand (1), Odisha (3) and Bihar (2)

A demonstration of amrutpani
Photo Courtesy: Water Organisation Trust (WOTR)

COMMUNITIES REACHED

1. Vulnerable communities in semi-arid and resource fragile regions
2. Individuals, institutions and communities working in the field of NRM and CCA

ORGANISATION OVERVIEW

Established in 1993, WOTR is a globally recognised organisation dedicated to transforming the lives of millions of poor across India through participatory watershed development and eco-systems restoration, climate resilient sustainable agriculture, integrated and efficient water management and climate change adaptation, with a special emphasis on building resilience of communities, farmers and women. As an organisation committed to applied research, WOTR Centre for Resilience Studies (W-CReS) focuses on engaging with institutional and other stakeholders so that the learnings from ground experience and research programmes can translate and contribute to shaping effective policies and programmes.

CHALLENGE

In resource fragile areas, the demands and claims on the environment are enormous. Unless they are managed within the carrying capacity of the available natural resources, the local ecology and ecosystem will progressively deteriorate to a point where it can no longer provide environmental services. A degraded ecosystem further pushes the communities living within it into poverty and deprivation leading to migration.

INTERVENTIONS

1. Ecosystems, watershed development and land management.

2. Water stewardship - water budgeting and water resource management.

3. Climate resilient agriculture, soil health management, crop-weather advisories.

4. Sustainable and adaptive livelihoods.

5. Women's empowerment, food and nutrition security.

ACHIEVEMENTS AND IMPACT

- Impacted 37,00,000 lives from 4,800 villages across 8 states
- Trained over 475,000 persons from India and across the world
- Land for Life Award 2017 from UN Convention to Combat Desertification
- Kyoto World Water Grand Prize 2009 during 5th World Water Forum; Krishi Ratna Award 2010 from Government of Maharashtra

PARTNERS AND FUNDERS

For more information on partners, visit WOTR here

Governance and Policy Solutions in Water

~~~~~

Advanced Centre for Water Resource Development and Management (ACWADAM)

Aga Khan Rural Support Programme (India) (AKRSPI)

Ashoka Trust for Ecology and Environment (ATREE)

Bharat Rural Livelihood Foundation (BRLF)

Development Alternatives (DA)

Foundation for Ecological Security (FES)

Professional Assistance for Development Action (PRADAN)

Society for Promoting Participative Ecosystem Management (SOPPECOM)

Watershed Support Services and Activities Network (WASSAN)

Advanced Centre for Water Resource Development and Management (ACWADAM)

FOUNDED: 1998

WEBSITE: http://www.acwadam.org/

THEME	Governance and Policy		OUTCOMES	Water Access, Safety & Security

LEADERSHIP: Dr. Himanshu Kulkarni - Executive Director

ANNUAL OPERATING BUDGET (2018-19): Less than INR 1 cr

GEOGRAPHICAL REACH: Pan-India

Borewell Discharge Measurement
Photo Courtesy: Advanced Centre for Water Resource Development and Management (ACWADAM)

COMMUNITIES REACHED

Local Communities

ORGANISATION OVERVIEW

ACWADAM undertakes independent and collaborative research to develop an improved understanding of aquifers, the demand imposed on groundwater and the associated supply systems to fill the gap between academicians and practitioners. ACWADAM dovetails 'classical' research and action research into a 'facilitative' mode to produce improved responses to groundwater problems in different parts of India. Their research on aquifers, watershed management and urban groundwater feeds into policy reform.

CHALLENGE

Interventions like watershed management lack integration of hydrogeological principles of aquifer systems. This leads to serious gaps in expected and actual outcomes. A similar pattern is evident in policy frameworks around groundwater due to a lack of informed perspective on how aquifers must be managed within an ecosystem.

INTERVENTIONS

1. Participatory groundwater management in Beed District
    a. ACWADAM created awareness among communities about groundwater as there was no information available to them about aquifers.
    b. It established a hydrogeological monitoring system in the village.
    c. A groundwater management plan was prepared for Nitud village on the basis of a research-based knowledge database.

2. Springshed water management in Nagaland
    a. ACWADAM developed a monitoring setup for continuous data collection on springs (mainly weather and spring recharge data).
    b. It identifies natural groundwater recharge areas based on local hydrogeology.
    c. It developed a model pilot springshed based on action research and provided a plan for further research on groundwater in the area.

ACHIEVEMENTS AND IMPACT

● 1,00,000 lives impacted

PARTNERS AND FUNDERS

For more information on partners, visit ACWADAM here

Aga Khan Rural Support Programme (India) (AKRSPI)

FOUNDED: 1984 | **WEBSITE: http://www.akrspindia.org.in/**

THEME	Governance and Policy		OUTCOMES	Water Access, Safety & Security

LEADERSHIP: Apoorva Oza – CEO

ANNUAL OPERATING BUDGET (2018-19): Over INR 50 cr

GEOGRAPHICAL REACH: Bihar (5 Districts)

A water user of Sangam Payjal Samiti
Photo Courtesy: Bandra Block Team of AKRSPI(I), Muzaffarpur, Bihar

COMMUNITIES REACHED

1. Vulnerable communities in rural regions
2. Rural women

ORGANISATION OVERVIEW

AKRSPI works on four major themes: Community-managed natural resource management, sustainable livelihoods, water and sanitation, and youth development. In each of these themes, it evolves context specific approaches and technologies. The Participatory Rural Appraisal (PRA) approach was first innovated by AKRSPI and MYRADA along with Robert Chambers. In drinking water, the low-cost community-managed drinking water system was innovated by AKRSPI and then adapted by the Government of Bihar. The mini-water testing laboratory was also innovated to respond to the need for small water testing facilities at a block level.

CHALLENGE

Despite progress in other infrastructure and service provisions, providing access to potable drinking water remains a challenge in most rural areas. The complex aspect of this issue is that the problem defies natural conditions. Medium rainfall regions of Saurashtra and Madhya Pradesh, and high rainfall regions like Dangs in Gujarat have problems of access, while shallow groundwater regions of north Bihar and coastal Gujarat have problems of water quality.

INTERVENTIONS

1. Integrated water management
   a. AKRSPI improved household-owned drinking water assets and promoted a village-level system in collaboration with community institutions to provide for safe drinking water with source sustainability through groundwater recharge.
   b. It operates low-cost water testing laboratories at a block-level that help educate villagers on water quality and test samples for safety.

2. Addressing coastal salinity
   a. It implemented low-cost community driven interventions in Gujrat to address saline intrusion.

ACHIEVEMENTS AND IMPACT

- 15,00,000 lives impacted
- TOI Social Impact Award - 2015

PARTNERS AND FUNDERS

For more information on partners,
visit AKRSPI here

Ashoka Trust for Ecology and Environment (ATREE)

FOUNDED: 1996	WEBSITE: https://www.atree.org/

THEME	Governance and Policy		OUTCOMES	Water Access, Safety & Security	

LEADERSHIP: Dr. Nitin Pandit – Director

ANNUAL OPERATING BUDGET (2018-19): Over INR 10 cr

GEOGRAPHICAL REACH: Pan-India

Soil core collection on a sediment bar on the banks of the upper Rambi
Photo Courtesy: Nirmalya Chatterjee

COMMUNITIES REACHED

Individuals, institutions and communities working in the field of participatory groundwater management

ORGANISATION OVERVIEW

Ashoka Trust for Research in Ecology and the Environment (ATREE) is a global non-profit organisation which generates interdisciplinary knowledge to inform policy and practice towards conservation and sustainability. The organisation aims to generate interdisciplinary knowledge for achieving groundwater security and sustainable development. ATREE is also uniquely positioned to tackle complex socio-environmental problems through dynamic engagement with markets and communities and by collaborating with social entrepreneurs to build businesses that create livelihoods while sustaining the natural resource base.

CHALLENGE

India as an economy, is highly dependent upon groundwater as a resource. There are several challenges with respect to management of this delicate resource both at the community and policy level. Stakeholders lack understanding of aquifers and their hydrogeology, which demonstrates lack of scientific decision-making around groundwater. At the same time, policies have not provided any serious legal backing to the voluntary efforts of community to augment or protect the groundwater.

INTERVENTIONS

1. Creating societal tech-platforms for the dissemination of data to promote citizen science.

2. Capacity building of government agencies in Integrated Water Resources Management and the use of modern ICT tools.

3. Demonstrating pilots to test new approaches for lakes, wetlands and waterways restoration.

4. Conducting evidence-based scientific research for policy advocacy and governance.

ACHIEVEMENTS AND IMPACT

- According to the UPENN Report, ATREE is the 2nd highest ranked environmental think tanks in Asia.
- 12,000 lives impacted.
- Ryutaro Hashimoto APFED (Asia Pacific Forum for Environment and Development) Gold Award - 2009.
- Distinguished Service Award from the Society for Conservation Biology (SCB) Asia Section, 2016.

PARTNERS AND FUNDERS

For more information on partners,
visit ATREE here

Bharat Rural Livelihood Foundation (BRLF)

FOUNDED: 2013

WEBSITE: https://www.brlf.in/brlf2/

THEME Governance and Policy

OUTCOMES Water Access, Safety & Security

LEADERSHIP: Pramathesh Ambasta – CEO

ANNUAL OPERATING BUDGET (2018-19): Over INR 10 cr

GEOGRAPHICAL REACH: Madhya Pradesh, Maharashtra, Odisha, Chhattisgarh, Telangana, Rajasthan, West Bengal, Jharkhand and Gujarat

Check dam reparation in Pipalpada, Gujarat
Photo Courtesy: Bharat Rural Livelihoods Foundation (BRLF)

COMMUNITIES REACHED

1. Tribal communities
2. Individuals, institutions and communities working in the field of groundwater management

ORGANISATION OVERVIEW

Bharat Rural Livelihoods Foundation (BRLF) was set up by the Government of India as an independent society under the Ministry of Rural Development, to scale up civil society action in partnership with the central and state governments. It aims to facilitate a close coordination between civil society organisations and government for the development of rural households.

CHALLENGE

The Central Indian Tribal Belt is water-stressed and rainfed. The share of tribals in Gross Irrigated Area is only 6.2%, with only 22% of tribal landholdings being irrigated. Undulating topography leads to high rates of runoff and erosion of the topsoil. As a result, agricultural productivity is very low. A more disaggregated analysis of the geography also shows that there are pockets where groundwater is being over-exploited. Groundwater also suffers from issues of contamination and quality.

INTERVENTIONS

1. Natural resource management: BRLF partners have constructed 13,436 water harvesting structures, benefiting 2.21 lakh families. About 54,955 hectares of land have been brought under assured irrigation. 17,250 hectares of farmland have been treated through bunding, benefiting more than 36,000 households.

2. Springshed rejuvenation: Partnering with the Government of West Bengal and Arghyam Trust, BRLF has embarked upon a spring rejuvenation program in four northern hill districts of the state, leading to rejuvenation of 184 springs.

3. Ushar Mukti: In 2017, at the invitation of the West Bengal's MGNREGA Cell, BRLF has embarked upon a large-scale partnership for watershed development based on MGNREGA, across 55 blocks of 6 districts of the western part of West Bengal. The programme is expected to leverage INR 1500 crores of MGNREGA funds over four years and has already led to the preparation of 1,02,477 plans.

4. Chhattisgarh mega watershed programme: The Government of Chhattisgarh invited BRLF to carry out a programme similar to Ushar Mukti across 26 blocks of the state. Program execution is expected to carry out watershed treatment across more than 7 lakh hectares in the state.

5. Participatory groundwater management: BRLF has partnered with ACWADAM, ACT, WASSAN and PSI to generate evidence and knowledge from this pilot to make grounds for an informed national-level strategy for groundwater management in the country.

ACHIEVEMENTS AND IMPACT

- 29,00,000 lives impacted
- Mahatma Award for Social Good - 2019
- Jalstar Award by Divyabhaskar Group

PARTNERS AND FUNDERS

WABAG
sustainable solutions. for a better life.

JSLPS
Jharkhand State Livelihood Promotion Society

AXIS BANK FOUNDATION

TATA TRUSTS
Making A Sustainable Difference

Arghyam
Safe. sustainable water for all

For more information on partners, visit BRLF here

Development Alternatives (DA)

FOUNDED: 1983

WEBSITE: https://www.devalt.org/

| THEME | Governance and Policy | | OUTCOMES | Water Access, Safety & Security | |

LEADERSHIP: Dr. Arun Kumar – President

ANNUAL OPERATING BUDGET (2018-19): Over INR 10 cr

GEOGRAPHICAL REACH: Rajasthan, Uttar Pradesh, Madhya Pradesh, Uttarakhand and Odisha

Basic Needs Fulfillment (BNF) infrastructure - Community operated water services
Photo Courtesy: Development Alternatives

COMMUNITIES REACHED

1. Rural communities
2. Women of village households

ORGANISATION OVERVIEW

Development Alternatives is the world's first social enterprise dedicated to sustainable development. It has large scale programmes on integrated village development and natural resource management with a focus on water and livelihoods. The organisation also works extensively on policy research to scale decentralised solutions on water security and ecological sustenance.

CHALLENGE

Climate change and rapid urbanisation have affected village communities in terms of sustainable delivery of safe drinking water. This problem is severe in regions of Rajasthan and Madhya Pradesh where the level of water stress is very high. There is growing distress among rural populations for access to usable water at the household level.

INTERVENTIONS

1. Shubhkal programme: The programme involved educating communities on efficient use of water and the augmentation of available water resources to ensure security.

2. CLEAN India: The programme merges GIS tools and scientific analysis with participatory methods to tap into the ecological knowledge of communities and helps in building climate resilience by addressing existing practices that are leading to water scarcity of the region.

ACHIEVEMENTS AND IMPACT

- 12,000 lives impacted
- UNEP Science Policy Lifetime Award - 2016
- 850 million litres of water saved annually

PARTNERS AND FUNDERS

For more information on partners, visit Development Alternatives here

Foundation for Ecological Security (FES)

FOUNDED: 2001	WEBSITE: http://fes.org.in/

THEME	Governance and Policy		OUTCOMES	Water Access, Safety & Security	

LEADERSHIP: Jagdeesh Rao Puppala – CEO

ANNUAL OPERATING BUDGET (2018-19): Over INR 50 cr

GEOGRAPHICAL REACH: Rajasthan, Odisha, Madhya Pradesh, Himachal Pradesh, Chhattisgarh, Andhra Pradesh, Gujarat, Karnataka

Communities using the CLART tool
Photo Courtesy: Arpit Deomurari, 2015

COMMUNITIES REACHED:

1. Village institutions and Panchayats
2. Local communities in forested regions

ORGANISATION OVERVIEW

FES works towards centre-staging an ecological agenda alongside priorities of economic growth. It brings two fundamental slants to the practice – an ecological leaning to the dominant views of natural resource management where 'nature and natural processes' are often disregarded, and secondly, a Commons paradigm in the governance of natural resources. By adopting practices based on the Commons principle, FES has actively worked towards water security by influencing demand-side management of communities in rural regions. The organisation is focused on protecting both surface water and groundwater resources through its ecosystem conservation programmes.

CHALLENGE

Dryland regions of India in states like Madhya Pradesh, Gujarat and Karnataka have been facing depletion of groundwater levels for many years, leading to severely stressed ecosystems and rural livelihoods. Village institutions are often not aware of treating their resources as Commons for long-term sustainability. This results in a failure of tapping into the potential of Commons to provide for resilient agriculture and water security.

INTERVENTIONS

1. Creating societal tech-platforms for the dissemination of data to promote citizen science.

2. Capacity building of government agencies in Integrated Water Resources Management and the use of modern ICT tools.

3. Demonstrating pilots to test new approaches for lakes, wetlands and waterways restoration.

4. Conducting evidence-based scientific research for policy advocacy and governance.

ACHIEVEMENTS AND IMPACT

- More than 1,00,00,000 lives impacted
- TOI Social Impact Award for Best NGO - 2012
- UNCCD Land for Life Award - 2013

PARTNERS AND FUNDERS

For more information on partners,
visit FES here

Professional Assistance for Development Action (PRADAN)

FOUNDED: 1983   **WEBSITE: http://www.pradan.net/**

| THEME | Governance and Policy | | OUTCOMES | Water Access, Safety & Security | |

LEADERSHIP: Manas Satpathy - Integrator

ANNUAL OPERATING BUDGET (2018-19): More than INR 100 cr

GEOGRAPHICAL REACH: Bihar, Chhattisgarh, Jharkhand, Madhya Pradesh, Odisha, Rajasthan, West Bengal

Lift irrigation in Balaghat, Madhya Pradesh
Photo Courtesy: Pandit Arjun Jadhav (PRADAN, Balaghat, Madhya Pradesh)

COMMUNITIES REACHED

1. Rural households and farmers
2. Women in Self-Help Groups
3. Marginalised communities

ORGANISATION OVERVIEW

PRADAN works in the poorest regions of India to help vulnerable communities organise collectives that help people, especially women, gain access to livelihood. PRADAN introduced the concept of Integrated Natural Resource Management, later used in watershed development programmes across India. They also partner with civil society organisations and government to influence development policies.

CHALLENGE

Degradation of natural resources is a growing concern as it adversely affects the life and livelihood of local people. Farmers' productivity suffers due to a lack of access and security to water sources. Several rivers and water bodies are drying up in the states where PRADAN works.

INTERVENTIONS

1. USHARMUKTI- Natural resource management for farm productivity
   a. It collaborated with the Panchayati Raj Department and Bharat Rural Livelihood Foundation (BRLF) to mobilise funds for rejuvenating the seven rivers in the western parts of West Bengal.
   b. The project will revitalise 4,00,000 hectares of upland, and irrigate 3,00,000 hectares of agricultural land.

2. West Bengal accelerated development of micro-irrigation project
   a. It engaged in building Water Users Associations (WUA) as sustainable institutions for water management and developed irrigation systems.

3. Impacting 1,00,000 marginalised farmers
   a. A series of capacity-building programmes have been conducted on watershed principles, Integrated Natural Resource. Management (INRM) approach, the Geographic Information System (GIS), Management Information System (MIS), etc. - at state, regional and Panchayat levels.

ACHIEVEMENTS AND IMPACT

- More than 40,00,000 lives impacted
- 6,000 villages in India have adequate safe drinking water through PRADAN interventions
- Process Excellence Award for grassroots work by Axis Bank - 2016
- TOI Social Impact Award for Livelihoods Promotion
- Best Social Enterprise Award - 2018

PARTNERS AND FUNDERS

For more information on partners,
visit PRADAN here

Society for Promoting Participative Ecosystem Management (SOPPECOM)

FOUNDED: 1991　　　　**WEBSITE: https://www.soppecom.org/**

| THEME | Governance and Policy | | OUTCOMES | Water Access & Security | |

LEADERSHIP: Vilas Gore, Seema Kulkarni and K. J, Joy – Governing Body Members

ANNUAL OPERATING BUDGET (2018-19): Less than INR 1 crore

GEOGRAPHICAL REACH: All India with an emphasis on Maharashtra

Construction of barrage on the Hasdeo river
Photo Courtesy: Society for Promoting Participative Ecosystem Management (SOPPECOM)

COMMUNITIES REACHED

1. Farmers, women and marginalised rural communities
2. Individuals, institutions and communities working in the field of water and land policy advocacy

ORGANISATION OVERVIEW

Society for Promoting Participative Ecosystem Management (SOPPECOM) is a non-profit organisation working in the area of Natural Resource Management (NRM) primarily in rural areas. SOPPECOM extends its support to grassroots groups working on NRM issues through training, resource literacy, participatory planning, and research and policy advocacy. In the water sector, it advocates an integrated approach - integration of surface water and groundwater as well as local (small) and exogenous (large) sources, and equitable distribution.

CHALLENGE

Inequitable and unsustainable use of available water resource leads to water insecurity and conflicts around both surface and groundwater in India. Lack of participation of users in water management is another contributor to the water crisis. A lack of emphasis on water conflicts within the larger policy framework causes the problem to persist.

INTERVENTIONS

1. Participatory irrigation management:
   a. SOPPECOM helped organise and stabilise the first Water Users Association (WUA) in Maharashtra and followed this with 15 more WUAs.
   b. SOPPECOM has published a report on amending Irrigation Acts for Participatory Irrigation Management and studied the issue of tailender and other types of deprivation in command areas.

2. Participatory resource mapping, knowledge production and policy advocacy
   a. SOPPECOM has created and analysed a database for further planning at various scales like cadastral, micro-watershed and sub-basin.
   b. It has undertaken studies on various dimensions of water-environment-livelihood interactions.
   c. Core activities of the programme include training young researchers and professionals on water related issues.

ACHIEVEMENTS AND IMPACT

- About 30,000 lives impacted

PARTNERS AND FUNDERS

Watershed Support Services and Activities Network (WASSAN)

FOUNDED: 1999

WEBSITE: https://www.wassan.org/

THEME	Governance and Policy		OUTCOMES	Water Access, Safety & Security	

LEADERSHIP: Dr. A. Ravindra – Executive Secretary and Director

ANNUAL OPERATING BUDGET (2018-19): Less than INR 10 cr

GEOGRAPHICAL REACH: Telangana (3 districts), Andhra Pradesh (10 Districts), Orissa (10 Districts)

Bore well owners share groundwater with farmers without bore wells
Photo Courtesy: Watershed Support Services and Activities Network (WASSAN)

COMMUNITIES REACHED

1. Economically-backward sections including Scheduled Castes and Tribes
2. Individuals, institutions and communities working in the field of watershed management, rainfed agriculture and participatory groundwater management

ORGANISATION OVERVIEW

WASSAN works to make public investments (on water/ agriculture/livelihoods) more effective by collaborating/ networking with a large number of partners including SPOs and government agencies. It provides support on planning, monitoring, evaluation, training, research and documentation of activities. WASSAN Group of Institutions' efforts are mainly to improve policy and practice related to rainfed agriculture, natural resource management and livelihoods promotion following watershed management principles.

CHALLENGE

Currently, government policy allocates little funding towards watershed management and groundwater governance in the country. In spite of large-scale good practices and the need for such interventions (policy, programme and investments), there is a lack of support from the government in building a cohesive framework to these initiatives.

INTERVENTIONS

1. Water and watershed management
   a. WASSAN integrated participatory groundwater principles into watershed management projects in India.
   b. WASSAN executed large-scale community centric project on fisheries, drinking water and critical irrigation in rainfed regions of the country.

2. Revitalisation of rainfed agriculture
   a. WASSAN is functioning as lead technical agency of IFAD and GoAP funded AP Drought Mitigation Project in Andhra Pradesh covering 1,65,000 families.
   b. WASSAN is functioning as Secretariat to Orissa Millets Mission, covering 10 districts with a network of 30+ NGO partners.

ACHIEVEMENTS AND IMPACT

- 5,00,000 lives impacted
- Best Civil Society Initiative by Government of Odisha - 2016

PARTNERS AND FUNDERS

For more information on partners,
visit WASSAN here

REFERENCES

1. KPMG (2010). Water sector in India: Overview and focus areas for the future
2. http://arghyam.org/
3. KPMG (2010). Water sector in India: Overview and focus areas for the future
4. https://idronline.org/water-is-getting-scarce-in-india-but-not-for-everyone/
5. NITI Aayog CMWI Report 2019, Pg 16
6. World Bank (2010). Deep Wells and Prudence: Towards Pragmatic Action for Addressing Groundwater Overexploitation in India
7. https://idronline.org/water-is-getting-scarce-in-india-but-not-for-everyone/
8. https://niti.gov.in/writereaddata/files/new_initiatives/presentation-on-CWMI.pdf
9. Arghyam note: An overview of groundwater and possibilities for collective action
10. https://idronline.org/p-sainath-the-water-crisis-is-not-caused-by-drought/
11. https://www.safewaternetwork.org/sites/default/files/SWN_India%20Sector%20Review_Sept%202014_Full_Report.pdf
12. https://guj-nwrws.gujarat.gov.in/showpage.aspx?contentid=1476&lang=english
13. http://arghyam.org/
14. Sattva interview with Arghyam, August 2019
15. Sattva interview with Arghyam, August 2019. Arghyam internal document ("Strategic Review with Nandan Nilekani", September 2014)
16. Sattva interview with Arghyam, August 2019.
17. http://arghyam.org/focus_area/water-security/
18. http://arghyam.org/focus_area/water-security/
19. https://waterconflictforum.org/
20. http://arghyam.org/gram-panchayat-organisation-development-initiative-gpod/
21. http://www.fluorideindia.org/about/
22. http://www.arsenicnetwork.in/
23. Sattva interview with Arghyam, August 2019.
24. https://www.indiawaterportal.org/about
25. India Water Portal: Challenges in water governance- a story of missed opportunities, 2019
26. NITI Aayog CMWI Report 2019, Pg 13-24
27. Arghyam note: An overview of groundwater and possibilities for collective action
28. NITI Aayog CMWI Report 2019, Pg 16
29. NITI Aayog CMWI Report 2019, Pg 17
30. Arghyam note: An overview of groundwater and possibilities for collective action
31. Arghyam note: An overview of groundwater and possibilities for collective action
32. Arghyam note: An overview of groundwater and possibilities for collective action
33. Arghyam note: An overview of groundwater and possibilities for collective action
34. P Sainath on India Water Crisis
35. Arghyam note: An overview of groundwater and possibilities for collective action
36. Equity and Access: Community based water management in urban poor communities: an Indian case study, National Foundation for India, 2011
37. Equity and Access: Community based water management in urban poor communities: an Indian case study, National Foundation for India, 2011
38. Arghyam note: An overview of groundwater and possibilities for collective action, India Water Portal: Politics of Groundwater
39. India Water Portal: Politics of Groundwater
40. Arghyam note: An overview of groundwater and possibilities for collective action, India Water Portal: Politics of Groundwater
41. Arghyam note: An overview of groundwater and possibilities for collective action, India Water Portal: Politics of Groundwater
42. https://ssir.org/articles/entry/arghyam
43. https://indianexpress.com/article/explained/mihir-shah-panel-water-management-cwc-3001152/
44. https://www.livemint.com/Politics/iWh9H7NEqcZWMnEWtOoaVP/Funds-to-states-will-be-based-on-performance-Parameswaran-I.html

ABBREVIATIONS

AKRSPI: Aga Khan Rural Support Programme (India)

ACT: Arid Communities and Technologies

ATREE: Ashoka Trust for Research in Ecology and Environment

ACWADAM: Advanced Centre for Water Resource and Management

APFED: Asia Pacific Forum for Environment and Development

BRLF: Bharat Rural Livelihood Programme

CDD: Consortium for DEWATS Dissemination

CHIRAG: Central Himalayan Rural Action Group

CLART: Composite Landscape Assessment and Restoration Tool

CMWI: Composite Management Water Index

CPR: Common Pool Resource

DA: Development Alternatives

FES: Foundation for Ecological Security

FICCI: Federation of Indian Chambers of Commerce and Industry

HSS: Himalaya Seva Sangh

NCWS: Naandi Community Water Services Private Limited

NITI Aayog: National Institution for Transforming India Aayog

PSI: People's Science Institute

PRADAN: Professional Assistance for Development Action

SOPPECOM: Society for Promoting Participative Ecosystem Management

TOI: Times of India

UNCCD: United Nations Convention to Combat Desertification

WOTR: Watershed Organisation Trust

WASSAN: Watershed Support Services and Action Network

Sattva is a social impact strategy consulting and implementation firm. Sattva works closely at the intersection of business and impact, with multiple stakeholders including non-profits, social enterprises, corporations and the social investing ecosystem. Sattva works on the ground in India, Africa and South Asia and engages with leading organisations across the globe through services in strategic advisory, realising operational outcomes, CSR, knowledge, assessments, and co-creation of sustainable models. Sattva works to realise inclusive development goals across themes in emerging markets including education, skill development and livelihoods, healthcare and sanitation, digital and financial inclusion, energy access and environment, among others. Sattva has offices in Bangalore, Mumbai, Delhi and Paris.

Sattva Research works on research and insights to influence decision-making and action towards social impact in the ecosystem in Asia. Sattva Research has partnered with organisations such as CII, USAID, AVPN, DFID, GIZ and Rockefeller Foundation to publish research, case studies and insights, and engages sector leaders through roundtables, conferences and impact circles.

Visit us at: www.sattva.co.in
Reach us at: knowledge@sattva.co.in

Follow us on:
Twitter   @_sattva
Facebook   @SattvaIndia
Instagram   @sattvaindia
LinkedIn   @https://www.linkedin.com/company/sattva-media-and-consulting-pvt-ltd-/