

## Case studies on rural ‘Integrated Water Resource Management’

*Documentation (field visits, interviews)*

*Photography*

*Writing*

The project was a pilot initiative on Integrated Water Resource Management covering 57 villages in Gujarat, Telangana and Karnataka states and funded by the European Union and implemented by Vrutti in collaboration with Gender and Water Alliance (GWA), Development Support Centre (DSC), Youth for Action (YFA) and Swasti.

The case studies conducted for two villages from each state, document the activities under the project with a focus on their direct impact thereof on the quality of life and livelihoods on the ground through first person accounts and experiences.



A VILLAGE  
FINDS ITS  
OWN  
SOLUTION  
TO WATER

MINASPUR



**'People and Panchayat led Equitable Water Governance Model for Sustainable Economic Development', a European Union-funded pilot initiative on Integrated Water Resource Management in three Agro-Ecological Zones in India, implemented by a consortium of Vrutti, Development Support Centre, Youth for Action, Gender and Water Alliance and Swasti**



# MINASPUR

Minasapur, a village on the state highway to Hyderabad in northern Karnataka's Yadgir district, is home to 590 households, with 2,950 people. The village was chosen under the Suvarna Gramodaya Yojana, a Karnataka government programme for sustainable development of villages, in 2011.

Agriculture is the mainstay of livelihoods in Minasapur. The village receives an average annual rainfall of 707 mm, but only 120 hectares have access to irrigation. The remaining 760 hectares are rainfed. The declining access to irrigation over the years had led to a dip in agricultural productivity. This, coupled with more attractive options for livelihoods in nearby cities, had prompted extensive migration.



Baseline studies also revealed that all water sources and infrastructure for domestic use were concentrated in certain localities. A large part of the population depended on just one hand pump in working condition and a single well that needed repair. Drinking water was a major cause for concern, as the ground water had high levels of salinity and fluoride. Access to sources of drinking water too, was a problem, and women had to walk long distances to fetch water.

At the start of the project, Minasapur was categorised as a 'C' type village on the basis of its water governance, i.e. a place where no natural resource management-based initiative had taken place. Some lorem text over here, probably one or two more lines to make it look good please.

The Suvarna Gramodaya Yojana did bring some water-related initiatives to the village, but these were decided in advance without taking into account the needs of the villagers. So no sustainable solution to water resource management was found. Any initiative would, therefore, have to put people's needs first and be governed by the people.

It was under these circumstances that Sujal, a pilot project on Integrated Water Resource Management (IWRM)<sup>1</sup>, was launched in Minasapur.



Ground water in Minasapur was found to contain high levels of fluoride, rendering it unfit for drinking.

<sup>1</sup> Sujal is the people's name for the "People and Panchayat-led Equitable Water Governance Model for Sustainable Economic Development", a European Union-funded pilot initiative on Integrated Water Resource Management in three Agro-Ecological Zones in India, implemented by a consortium of Vrutti, Development Support Centre, Youth for Action, Gender and Water Alliance and Swasti

# SOLUTIONS TO IMMEDIATE PROBLEMS

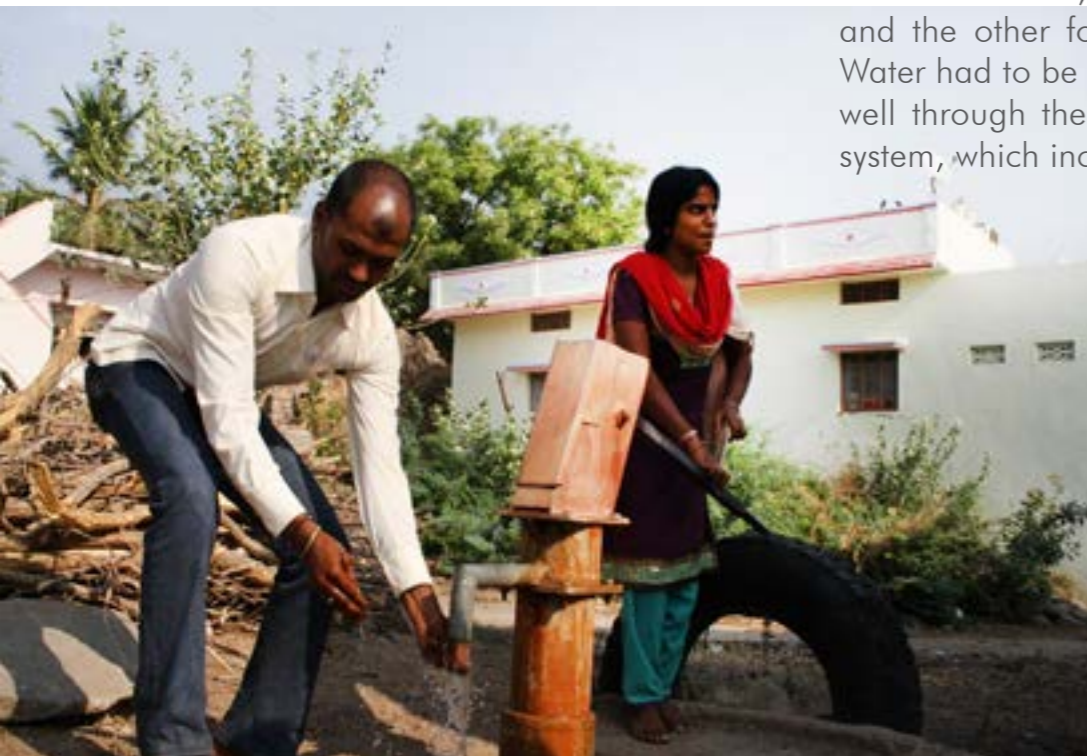
## Women reap the benefit of reduced drudgery

### THE PROBLEM

Accessibility, rather than availability, of water for a majority of the villagers, was the foremost problem identified by the Sujal Samiti in Minaspur.

Minaspur's drinking water came from an overhead tank and three hand pumps in working condition out of a total of 10. The overhead tank, with a capacity of

50,000 litres, was at least 200m away from a majority of the population. Of the three hand pumps in use, two catered to over a thousand people. Soon, one of the working hand pumps broke down as well. Another disadvantage of the hand pumps was that it took a lot of physical effort to pump up water, due to the low level of the ground water table. The village had three open wells of which two were in use, one for drinking water and the other for other domestic uses. Water had to be manually lifted from the well through the traditional rope pulley system, which increased drudgery.



The old-model hand pump took a lot of effort in pumping up water.

### WHAT WE DID

Two hand pumps were fitted with a ball-bearing mechanism that made it easier to operate. One of the hand pumps was repaired. Each fitting cost Rs 5,500, of which villagers contributed Rs 500 through the Sujal Samiti, and the rest was funded through the project. The cost of the ball-bearing mechanism is almost the same as that of a traditional handle, which makes it a viable option for future repair or replacement.

A tank of 1,000 litres each was installed on two of the three open wells in the village. Motors were fitted to pump water from the wells into the tanks. The cost of installation was Rs 33,000, of which the community contributed Rs 5,500 and the rest was funded through the project.



Fitting each well with a motor made it much easier to pump water into the storage tanks.



## Water in half the time!

Enkatamma works with her husband as a labourer on nearby farms. The 38-year-old earns Rs 50 on an average daily. Enkatamma's house is about 100 yards away from the newly installed ball-bearing hand pump. "My household chores now take half the time they used to," she says.

Enkatamma needs about 10 pitchers of water (15 litres each) every day for drinking and other household uses. Earlier, it would take her about 20 minutes to fill a pitcher. The installation of the ball-bearing mechanism has halved that time!

"It used to take me four hours every day just to fetch water. I would rush through my household chores before going to work in the fields. Many times, I'd have to fetch water from the public tank that is 200 metres away because there were too many of us using this hand pump. Now, I have time and even get to watch a bit of TV!" she says.

Enkatamma's neighbour, 18-year-old Kalyan, has a similar story. "This hand pump is so easy to use that even children can use it – many of them come with their mothers because they want to push the pump!"

For Kalyan, the ease of use of the hand pump means more. Kalyan lives with her parents, younger sister and two brothers, all three of whom go to school. She helps out her parents on their three acres where they grow paddy, groundnut and red gram.

"My mother has me and my younger sister to help at home. But once we get married and leave home, things like this new hand pump will make it easier for her. We have told our Sujal Samiti that we will maintain it well," says Kalyan.

# 30 households have toilets now

## THE PROBLEM

Less than 1% of the population had toilets.

“Going out in the open was embarrassing and scary, especially in the nights - we often chose the discomfort of holding it in.”

-Saroja, 45, Sujal Samiti member

Apart from a single toilet in use, Minaspur had no toilet facilities. Open defecation and urination were the norm. Narasimha Reddy and his wife Saroja have been married for 29 years. They have two daughters and a son. They grow paddy and groundnut on their four and a half acres of land. Both are members of the Sujal Samiti.

For Saroja and her daughters, the absence of a toilet was a nightmare. Saroja says, “It was not just embarrassing; we also had to watch out for snakes and scorpions. We’d usually venture out late at night to avoid passing vehicles and pedestrians. On rainy days, it was more difficult. We often chose to face the discomfort and hold it in than venture out.”



Narasimha and Saroja were one of the 30 families who built a toilet at their homes. “I visit the other families and tell them to keep their toilets clean,” says Narasimha, a Sujal Samiti member.

Narasimha says, “It was inconvenient even for men, especially when we fell ill with diarrhoea. There were more chances of catching an infection if we went out.

The ground water and open sources of water were also at risk of getting polluted from open defecation and urination. A few of us thought about building a toilet, but we didn’t have the money or enough motivation to get it done.”



Not having a toilet was not just embarrassing, but also dangerous, especially at night, says Saroja.

## WHAT WE DID

Not long after the formation of the Sujal Samiti, the members consulted other villagers and proposed that the construction of toilets was a pressing need in Minaspur. The samiti submitted a proposal for building 150 toilets for individual households to the panchayat.

Each toilet cost between Rs 18,000 and Rs 20,000. Partial funding of Rs 3,500 per toilet was sanctioned under the Central Government scheme, Nirmal Bharat Abhiyan, for a total of 30 toilets. IT services multinational Infosys contributed Rs 8,000 for each of the 30 toilets, while Rs 1,000

each was funded through the Sujal project. The 30 families in whose homes toilets were built for the first time contributed the balance. Each toilet measures at least 3x3 feet, depending on space, with an 8x8x7 foot underground septic pit.

Narasimha and Saroja’s family was one of the 30 who built a toilet. Says Narasimha, “As a samiti member, I regularly visit the homes with toilets and remind them to keep them clean. If I see children defecating outside, I tell them to use the toilet. My family has a better quality of life now and I want others to do so too.”



Narasimha offers an interesting twist to Minaspur's new tryst with sanitation. "Before my daughters get married, I will insist that the homes they marry into build a toilet if they don't have one! And I am not the only one who thinks so – ask the other 29 families." The construction of the toilets marks one of the first instances of convergence of government funds, funds from a private company, and community contributions in Minaspur for the Sujal project.

Three public toilets were also built with contributions from the gram panchayat. The samiti has submitted a proposal to the gram panchayat for building 150 more toilets. The proposal is likely to be sanctioned under the village budget for 2014-15.



Families who are yet to build a toilet at home use the public toilets, built with contributions from the gram panchayat.

For people like Fatima, who have no space at home for a toilet, a proposal has been submitted to build individual toilets on government land.



There are, however, 20 per cent of homes that do not have space for a toilet. Eighteen-year-old Fatima lives with her parents in a 10x10 foot house with no yard space. "Our house is too small, and it is adjacent to the road so we can't build outside either," she says.

For homes like Fatima's, the Sujal Samiti and the local civil society organisation implementing the project, Youth for Action, have proposed building a cluster of separate toilets on unused government land after obtaining government sanction. The toilets will be maintained by the respective owners. This proposal too has been submitted to the panchayat.



## Cover for a drain ensures safe crossing

An open drain, 12 ft long and 6 ft wide, was a major cause for concern for the families nearby. Mothers worried about their children falling into the drain. Crossing it was a tricky affair, especially during the rains, for farmers whose lands lay beyond the drain.

The Sujal Samiti undertook the construction of a stone and concrete slab to cover the drain. Of the total cost, the families who frequently used the pathway contributed Rs 1,000, and the project funded the balance of Rs 8,000.

# A COMMUNITY REMODELS ITS WATER PLAN



MALLAIPALLE



**'People and Panchayat led Equitable Water Governance Model for Sustainable Economic Development', a European Union-funded pilot initiative on Integrated Water Resource Management in three Agro-Ecological Zones in India, implemented by a consortium of Vrutti, Development Support Centre, Youth for Action, Gender and Water Alliance and Swasti**

# Introduction

The 'People and Panchayat-led Equitable Water governance in three Agro-Ecological Zones in India' project is a pilot initiative on Integrated Water Resource Management funded by the European Union and implemented by Vrutti in collaboration with Gender and Water Alliance (GWA), Development Support Centre (DSC), Youth for Action (YFA) and Swasti.

The project is aimed at improving health and livelihoods through efficient and effective management of water as a common property resource, eventually leading to poverty reduction and improvement in quality of life of people in rainfed areas. It is designed to establish a field-level community institutional model for equitable water governance led by the people and Panchayat – through the formation of people's institutions appropriately named 'Sujal Samiti'. 'Sujal' means 'good water' and Sujal for the consortium carries the meaning of ensuring safe, secured and equitable access to water. It also signifies 'good governance of water' as a resource and as a right.

The approach is built on three main areas: 1) improving water supply through development and management of water resources; 2) improving management of demand for water through efficient use of water for different needs and equitable distribution and access; and 3) water governance through a people and Panchayat-led process to build awareness and capacities to manage water resources.

The project covers three states in India with varying agro-ecological zones – North-eastern dry zone in Yadgir and Gulbarga districts in Karnataka (covering 19 villages), Southern Telangana zone in Mahabubnagar district in Andhra Pradesh (covering 20 villages) and North Gujarat zone in Sabarkanta district in Gujarat (covering 18 villages).

The project was launched on April 1, 2011 for duration of three years, till March 31, 2015.

While the focus of the first year was on preparatory activities such as rapport building, situation assessments, baselines, formation of the Sujal Samiti and getting a good understanding of the concept, strategies and activities of year two concentrated on taking the work initiated forward, moving the concepts and models to all the villages.

The following case study documents some of the activities undertaken to this effect and focuses on their direct impact thereof on the quality of life and livelihoods in the project location through first person accounts and experiences. These activities include renovation of existing water structures, low cost water management technologies, convergence proposals and action, awareness and implementation of better water management practices, and mobilisation, strengthening and capacity building of Sujal Samitis.

# MALLAIPALLE

Mallaipalle village is located in the Mahabubnagar district of Andhra Pradesh which receives an average rainfall of 604.56mm. Low rainfall has resulted in a poor supply of groundwater and lack of water for irrigation and feeding livestock. Before the Sujal project<sup>1</sup> was started in the village of Mallaipalle three years ago, only 50 per cent of the population of the village had ready access to clean drinking water. Two bore wells with hand pumps were the main sources of drinking water and the quality of water in one of the wells was poor. Accessibility was a major issue because the two hand pumps were located on the outskirts of the village.

With agriculture as the main occupation, the village has a total irrigated area of 340 hectares of which 280 hectares are rainfed. We conducted baseline studies at the beginning of the project and found that the village faced issues such as hand pumps being in poor condition, non-functioning bore and open wells, open defaecation and poor accessibility to alternative sources of drinking water. Many of these problems could be resolved by bridging the gap between the villagers and local governing bodies.

An easily accessible forum like the Sujal Samiti opened up a dialogue about how the village in its entirety could contribute to solving its water problems. A detailed analysis of water problems enabled the villagers to come up with a list of issues that needed to be resolved. They were also encouraged to participate in finding and implementing solutions.

<sup>1</sup>The Integrated Water Resources Management project, called Sujal, aims to establish a "People and Panchayat-led Equitable Water Governance Model for Sustainable Economic Development," funded by the European Union and implemented by a consortium of Vrutti, Development Support Centre, Youth for Action, Gender and Water Alliance and Swasti.

# PLANNING

## People join hands for change

The Sujal Samiti's initial task was to educate villagers on issues around drinking water, water used for irrigation and sanitation. We carried out water, sanitation and health training for community resource persons (CRPs), samiti members, schoolchildren, self-help groups, anganwadi and ASHA workers. In particular, we talked to villagers about hygiene, safe drinking water and sanitation; and trained the community on how to save and filter water.

Sujal Samiti members and schoolchildren held a candlelight walk and *shramdaan* or a voluntary contribution of labour to create awareness about drinking water, sanitation and agricultural issues.

To encourage participation by the entire community, the samiti organised a *kalajatha* in which actors put together theatre performances and musicals on the importance of water.

The Sujal Samiti in Mallaipalle comprises 23 members, including six women and representatives from the panchayat, ASHA workers, anganwadi workers and self-help groups. Ramesh Babu, the Sujal Samiti president, says, "We didn't know how to go about securing benefits from the government – we didn't know how much funds were allotted to the village for such facilities or that we could demand the use of the funds if they were not being utilised."



Ramesh Babu who is the Sarpanch and Sujal Samiti president encourages others to participate actively in samiti meetings

When the project began, Youth for Action (YFA) was already associated with Mallaipalle and villagers were familiar with the group. With YFA as the implementing partner for IWRM on the ground, villagers were more responsive because it was not a new entity for them. This helped in the gathering of baseline information from several surveys, group discussions and participatory activities. We called a meeting of all the villagers and spoke to them about how the IWRM project would benefit them. Most people in the village were initially reluctant to join the Sujal Samiti. According to Ramesh Babu, questions from the community included, “Why should we take on this extra work, when we have our daily duties? How do we benefit from this? You say the village will benefit but how do we benefit individually?”

The primary challenge in this case was to explain to the villagers that the work done by the Sujal Samiti could benefit individual households, ultimately benefitting the whole village. We explained to the villagers that an institution like the Sujal Samiti could assist in approaching the governmental bodies in the region to get work sanctioned. Early adopters like Ramesh Babu got involved and encouraged others in the village to participate proactively in Sujal Samiti meetings.

## SOLUTIONS TO IMMEDIATE PROBLEMS

### New accessible hand pump installed

#### THE PROBLEM

Before the IWRM project was introduced, the main sources of drinking water in Mallaipalle were the two bore wells, of which one had poor quality of water. The two hand pumps were located on the outskirts of the village and it took women about an hour to make a trip to the hand pumps, a kilometre away, and back. The village used to have two open wells, but they ran dry due to overuse. Everyone in the village had to rely on a single bore well to access clean drinking water. Moreover, for washing and cleaning, people had to walk 1.5 km to the open irrigation wells outside the village.

#### WHAT WE DID

A new hand pump was installed at a cost of Rs 20,500, of which the community contributed Rs 6,000. This went towards the construction of the concrete platform and labour costs. The Sujal project funded the Rs 14,500 that was needed to buy and install a new hand pump.

50 families benefited from the installation of the new hand pump. After this, two new hand pumps were subsequently installed by the gram panchayat.



## Chores take up less time

Venkatamma is 40 years old and works as an agricultural labourer. "It used to take me a long time to fetch water every day. A single trip to the hand pump and back used to take me about an hour," Venkatamma says. "I had to fetch water twice in the morning and twice again in the evening – with two pitchers on each trip," she explains.

When all of Venkatamma's children were still at home, they would make 20 such trips every day. "To save time, we'd wash clothes and bathe at the well and use the water we brought back for chores," she says. "We have to leave for the fields by 10 in the morning. Often, I'd go to work on an empty stomach because I wouldn't get time to eat after finishing my chores."

Apart from problems like the hand pumps breaking down, Venkatamma's family was finding it difficult to fetch water at night. They had to watch out for frogs and snakes, in addition to using extremely dirty water from the irrigation well.

The newly installed hand pump is just a few yards from Venkatamma's home and has cut down the time she spends fetching water to half an hour. "Thanks to the installation of the new hand pump, I am able to finish my chores and eat before going to work. I even get time to rest. Field work is laborious and I don't like to watch TV; I'd rather rest. I also get to catch up with my neighbours and friends now," says Venkatamma.



# Ball bearing mechanism installed on existing hand pump

## THE PROBLEM

One of the hand pumps had a handle that had to be manually operated. The women in the village, who were the ones to fetch water for the family, found it difficult to pump up water and some even hurt their hands if they were not careful. The sheer amount of physical effort it took to pump water for daily needs was becoming a problem for the women of the village.

## WHAT WE DID

In an attempt to make it easier to operate, the hand pump was fitted with a ball bearing mechanism at a cost of Rs 7,000. In addition to this, a submersible motor was fitted to the bore well at a cost of Rs 25,000.

Both mechanisms have made fetching water for various needs an easier task. When the village gets access to electricity for an hour every evening, the motor is switched on for those who need more water. At all other times, the ball bearing mechanism has helped pump up water much faster and with less effort.

# Farm ponds for conservation of water

The Sujal Samiti has also taken up water conservation measures in agriculture through rainwater harvesting by setting up 20 farm ponds. Thirteen of these have been completed and seven more are in progress. Each farm pond was set up at a cost of Rs 1,200 – made by digging a pond with an inlet and outlet for water to flow, secured by stones. The farm ponds also help recharge groundwater level.

The entire cost of Rs 1,200 per farm pond has been funded through the Sujal project.

Apart from these, the Sujal Samiti carried out repair and maintenance activities on water sources in the village. Two gate valves were fixed, gully checks were installed at a cost of Rs 11,200, open wells were de-silted at a cost of Rs 35,000, and a tank was repaired at a cost of Rs 8,000.



## 50 families have easy access to water

Vijaylakshmi, 19, is finishing junior college and wants to study nursing and tailoring afterwards. She is one of the users of the hand pump that has been installed with the ball bearing mechanism and motor through the Sujal project. She often helps out at home by fetching water from the hand pump twice a day. "We require a lot of water for the cattle, so I use the pump several times in the morning and evening," Vijaylakshmi says.

Her father takes up contractual work during the construction of roads and her brother grows paddy, groundnut and vegetables on their 10-acre farmland. With both her older sisters married, Vijaylakshmi takes some time off everyday from her studies to help her mother with fetching water.

The installation of the ball bearing mechanism on the hand pump has made it a lot easier for Vijaylakshmi to fetch water. "The previous hand pump was difficult to operate. Many times, I have injured my hands. Your fingers can get trapped while pushing the handle if you are not alert," she explains. With the installation of the ball bearing mechanism, the time it takes Vijaylakshmi to fetch water has halved.

The new mechanism has benefited 50 families in the village. Vijaylakshmi says she now has more time to concentrate on her studies and to play with her eight-month old nephew Ganesh.

# CONVERGENCE

People and panchayat lead the Sujal model for equitable water governance. A crucial aspect in ensuring this is convergence, or the coming together of government funds to augment contributions from the community.

After a series of discussions and proposed partnerships with various government departments at panchayat and district levels, the Sujal Samiti has worked with locals in order to identify the most pressing water problems. Activities carried out under the Water and Sanitation Health Action Plan between November 2013 and March 2014 involved a partnership between the government, villagers and community resource persons (CRP). The project saw a direct involvement of nearly 1,000 participants who played a proactive role in several activities.

The following activities have been made possible through convergence:

- Repair of natural tank: Rs 2 lakh (gram panchayat) which benefited 50 households
- Repair of hand pump: Rs 25,000 (gram panchayat) which benefited 120 households
- Construction of toilets: Rs 19,38,000 (Nirmal Bharat Abhiyan) which benefited 190 households

# Mallaipalle wins the Nirmal Grameen Puraskar

Before the Sujal project was launched in the village of Mallaipalle, only nine households had toilets – that is 0.8 per cent of the total population of the village. In the first year of its formation, the Sujal Samiti of Mallaipalle submitted a proposal seeking funds under the Nirmal Bharat Abhiyan for the construction of toilets.

Shortly after the proposal was sanctioned, 20 toilets were built in the project's first phase in 2012. At present, there are 190 toilets in the village of Mallaipalle! This outstanding achievement becomes apparent when compared to the 10 toilets built under the same scheme by 22 other villages in the Pangal Mandal in one year.

For this, Mallaipalli was awarded the Nirmal Grameen Puraskar in Pangal Mandal, by the District Water & Sanitation Committee, Mahbubnagar district. The award was presented to the Sarpanch and Sujal Samiti president, Ramesh Babu by the District Collector, Girija Shankar (IAS) on Republic Day 2014. Ramesh Babu is credited for taking the initiative and encouraging people of the village to take charge of the sanitation situation.

"We like that we get to be part of the solution to our problems. There is no one to blame but ourselves if things don't get done now and that is a different kind of empowerment. We still need a lot of help and training from YFA and IWRM before we can be confident of approaching the government about our problems on our own, but we believe in our abilities more now."

-Ramesh Babu, Gram Sarpanch and Sujal Samiti president

# SUJAL SAMITI, A PEOPLE'S INSTITUTION

## A Sujal Samiti involves the entire community

Ramesh Babu, the president of the Sujal Samiti and the village sarpanch, has helped put into action the convergence plans of the Sujal project. Since he has official access to district level government offices, there is an increased chance of leveraging government funds. So far, the Sujal Samiti has made improvements on existing drinking water sources in the village and made it easier for the community to get water for their household needs.

In addition to addressing issues of accessibility of drinking water, the Sujal Samiti has also made attempts to encourage sustainable use of water among the farmers in the village. With the example set by the Community Resource Person (CRP) taking the lead to demonstrate the System of Rice Intensification (SRI) on his farmland, four more farmers have stepped forward to do the same on their farms in 2014.

The creation of a Sujal Samiti in Mallaipalle has helped the community become aware of government schemes and programmes that can help the village gain better access to water. "Previously, there was nobody to ask the right questions. So funds were coming in, but were not being utilised for the work they were meant for," Ramesh Babu says.

Through a number of regular meetings and detailed discussions, the Sujal Samiti is in the process of constantly revising the priorities of the village and updating its needs. Apart from resolving water related problems, the Sujal Samiti in Mallaipalle has found itself playing the role of a self-governing body that works towards the welfare of all people in the village. In light of its rising popularity, the samiti finds itself resolving domestic disputes and helping people solve small problems at home or at work. The samiti meets once a month and sees a steady attendance from over 80 per cent of the members each month.

## The samiti acts on the village's problems

For Community Resource Person (CRP) Rajeshwar Reddy, it is paramount that he bridges the dialogue between the village and the community workers from YFA. "With YFA's help, we feel more confident in talking about our problems and taking them to the sarpanch. We attend meetings and workshops at the zilla (district) level, submit proposals to the mandal office and the collector's offices on our own, and talk to the officials. I have gone to submit proposals with other samiti members at least 10 times. We have never had exposure at this level before," Reddy explains.

"Let's say we need to find a way to conserve water for agriculture through drip irrigation and sprinklers. We discuss which and how many farmers are in need of this, identify the ones who are interested, work out the costs, discuss how to go about setting this up, find out about the scheme under the horticulture department, get tips on writing the proposal, and decide who goes to submit it to the gram panchayat," Reddy says.

In case of several issues to be discussed, the samiti meets more than once a month to address all the issues, says Reddy. As a community resource person, Reddy's role also involves visiting individual households to make people aware of hygiene, sanitation and water conservation practices. He works in collaboration with other Community Resource Persons from neighbouring

villages, all of whom track responses from the households that they have visited. "Going together with the others makes our visits more effective. People may ignore one person, but they can't ignore five! Also, when the villagers see someone new talking about these issues, they are bound to take more notice," Reddy says.

"We are definitely seeing a gradual change among the villagers. We can see people's habits changing according to what we've told them. Even children wash their hands before eating! It will take time for everyone in the village to start following good practices but many of them have started doing so – the others will follow," says Reddy.



Rajeshwar Reddy regularly visits households in the village to talk to them about hygiene and water conservation practices

# A VILLAGE WORKS THROUGH ITS WATER PROBLEMS



THOMALAPALLY



**'People and Panchayat led Equitable Water Governance Model for Sustainable Economic Development', a European Union-funded pilot initiative on Integrated Water Resource Management in three Agro-Ecological Zones in India, implemented by a consortium of Vrutti, Development Support Centre, Youth for Action, Gender and Water Alliance and Swasti**



# THOMALAPALLY

Thomalapally village, a part of Pebbair mandal in Mahabubnagar district of Andhra Pradesh, receives an average rainfall of 604.56mm. The low groundwater level in the district has led to a scarcity of water for drinking, domestic use and irrigation. Thomalapally is home to 1,588 people from 396 households. Over 55 per cent of the households (225 households) are categorised as 'poor.' The village also has a school and an anganwadi centre.

Most villagers in Thomalapally subsist on agriculture, growing paddy, groundnut and red gram. The demand for agricultural labour is, however, low. Decreasing productivity from agriculture and the lack of other livelihood opportunities have led to some people leaving the village to find work elsewhere.

The village has a total geographic area of 394 hectares, of which 115 hectares are irrigated and 255 hectares are rainfed. There are 60 irrigation wells in working condition and four bore wells for irrigation.

The drinking water sources in the village comprise three working hand pumps, two bore wells and one overhead tank. Some of the water sources in the village have salty water and are not used by villagers for drinking. Sanitation is also a pressing need as only 49 households

in the village had access to individual toilets. The closest banking and health facilities are 6 km away, in Pebbair.

At the start of the Integrated Water Resources Management project, called Sujal<sup>1</sup>, we conducted a detailed problem analysis of water resources management in Thomalapally, both for domestic use and irrigation. The analysis revealed a host of issues that could be resolved in partnership with the community, the panchayat and government departments at the block and the district level.

Inadequate rainfall and depleting groundwater table due to overuse have increased water scarcity during the summer months and during the cropping seasons in Thomalapally. The findings of the baseline study and the subsequent Participatory Rural Analysis (PRA) highlighted the need to promote and adopt soil and water conservation methods as the primary solutions to combating water scarcity.

To recharge ground water, we identified activities such as building check dams and farm ponds, de-silting open wells and watershed initiatives. Repairing the main irrigation channel and constructing feeder channels, as well as promoting drip and sprinkler irrigation methods, were also listed as methods to efficiently use irrigation water and stem water wastage.

We discussed how to provide and increase access to clean drinking water, keeping in mind women and marginalised communities. These discussions took place during informal meetings, stakeholders' meetings and the PRA exercises. Repairing existing water infrastructure, including non-functional taps and leaks in the water pipelines, were identified as priorities.

The village did not have adequate drainage facilities and open defaecation was a common practice. Lack of proper sanitation and good hygiene had led to the groundwater being polluted and to an increase in the incidence of water-borne diseases. Our priority in sanitation was, therefore, to put in place a proper drainage system and build individual toilets.

The Sujal Samiti in Thomalapally was formed to manage water efficiently and effectively for the entire village. The samiti is a viable and easily accessible forum that opens up a dialogue between the people and the local authorities to facilitate access to government-allotted funds and information about water resources. The samiti, comprising villagers, takes charge of key issues in relation to the consumption of water in the village and act as a bridge between the people and governmental institutions.



<sup>1</sup> Sujal is the people's name for the "People and Panchayat-led Equitable Water Governance Model for Sustainable Economic Development", a European Union-funded pilot initiative on Integrated Water Resource Management in three Agro-Ecological Zones in India, implemented by a consortium of Vritti, Development Support Centre, Youth for Action, Gender and Water Alliance and Swasti.



# PLANNING

## Every villager has a stake in Sujal

The Sujal Samiti in Thomalapally includes anganwadi workers, ASHA workers, and members of the panchayat and self-help groups. The samiti currently has 19 members, five of whom are women. It is driven by young people like its 25-year-old president, Bharat Kumar, and 26-year-old Community Resource Person (CRP), Ram Babu.

“I joined the samiti because I want to be part of this development process for the village – there was little reason not to join after I understood the benefits the Sujal project could bring to Thomalapally’s water needs,” Bharat Kumar says.



Ram Babu visits households between 8am and 9am each day to talk to people about water conservation and hygiene practices

A thorough baseline survey of the village was conducted, followed by the Participatory Rural Analysis exercise that involved the community, the Sujal Samiti and the NGO partners facilitating the implementation of the project. The exercise resulted in comprehensive social and resource maps and seasonal analysis to identify the water and sanitation needs of the village.

By involving the community at every step, these exercises helped familiarise the villagers with the concept of integrated water resources management and convinced them of the need for the Sujal Samiti. Even though the village was familiar with Youth for Action (YFA), the implementing NGO partner on the ground, more than half the community was unaware about sanitation, hygiene and water management.

After getting the village together to elect the Sujal Samiti, we provided training to the samiti members, and other men and women on issues such as gender, water, health and sanitation. We organised rallies or *kalajathas*, and cleanliness drives.

Samiti members reached out to the villagers with the help of the community resource person. Ram Babu, who runs a photo studio in Pebbair, spends an hour visiting 10 households each day, and talks to people about water and sanitation. “Initially, they mostly ignored my visits and very few followed what I told them. Now, people have started to have more faith in the samiti because they have seen results – with the new taps that brought clean drinking water closer to their homes and with the drainage cover that kept dirty water from flowing on to the street,” he says.

In Thomalapally, each villager has become a stakeholder in the Sujal project, interacting with the panchayat and taking charge of their problems with water. According to Ram Babu, the villagers were involved in electing the members of the Sujal Samiti and have a clear idea of what the samiti is working towards in terms of the development and maintenance of water resources.

# SOLUTIONS TO IMMEDIATE PROBLEMS

## Easy access to drinking water with new taps

### THE PROBLEM

There were three hand pumps in the village of which only one hand pump had clean water fit for drinking. The hand pump with potable water was a kilometre away from many households. Moreover, most villagers used this hand pump, and so it would become crowded at times. Maniamma, who works as an agricultural labourer, corroborates this: "For the household and for the cattle, I used the hand pump near my house. But we didn't drink the water from this hand pump because it was not clean. So I used to fetch drinking water from a different bore well or the clean hand pump, both of which were far away."

Of the two bore wells, one was connected to the overhead tank which supplied water through a pipeline connected to taps in different parts of the village. But many people, like Maniamma, lived over a kilometre away from such taps.

### WHAT WE DID

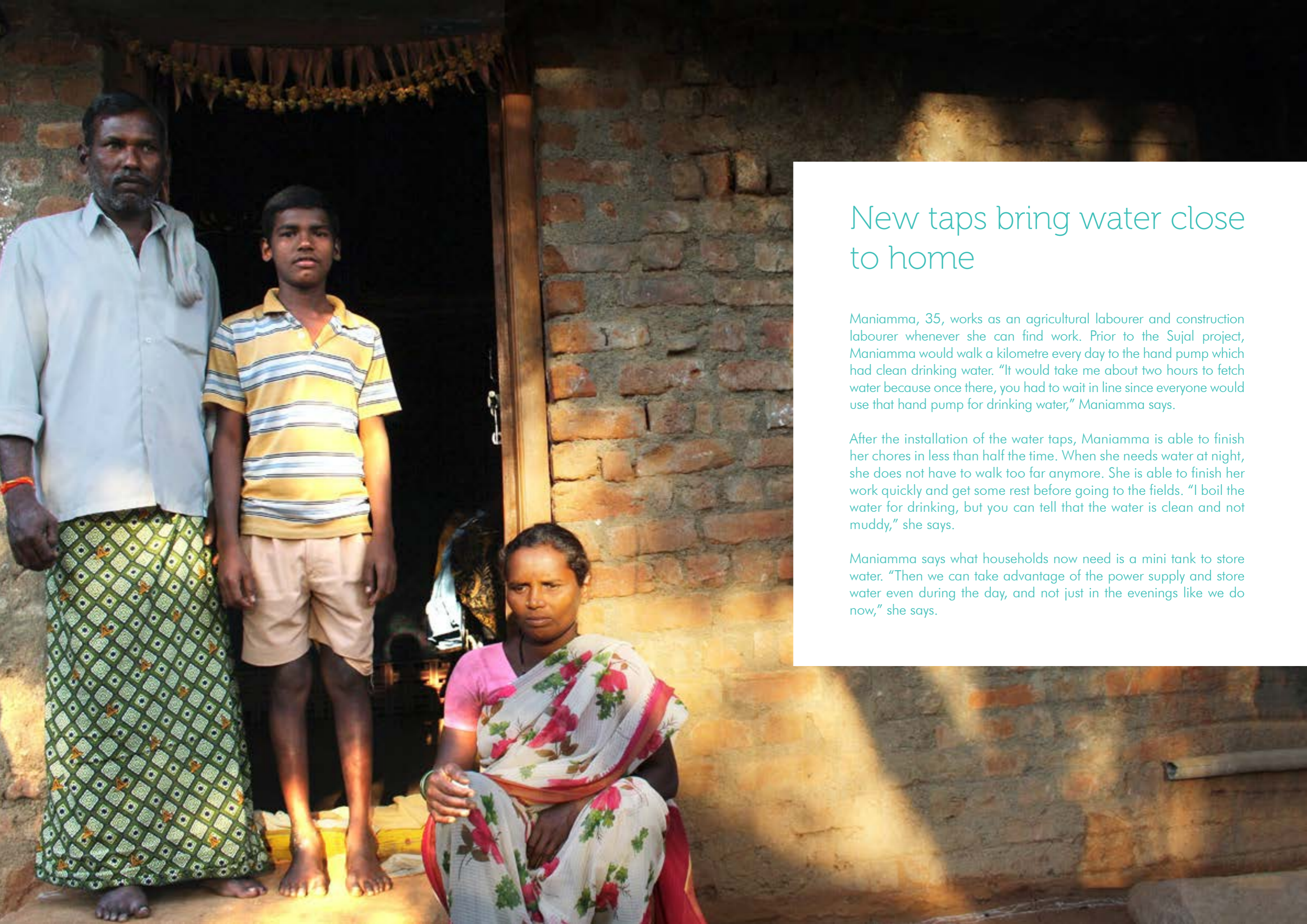
We installed two new tap connections to bring water from the overhead tank closer to people's homes – in this case 70 households, including Maniamma's home. The pipelines would pump the water to the taps when electricity was available in the village between 2pm and 4pm, and between 6pm and 6am. The new water tap connections were installed at a cost of Rs 7,250 funded by the Sujal project.

In addition, we also fixed the gate valve in the overhead tank water pipeline, at a cost of Rs 4,500 funded through the Sujal project. This has benefited 130 households.

We also repaired the tap and motor in the second bore well, at a cost of Rs 13,500 funded through the Sujal project and this too, has benefited 130 households .



The new tap connections have brought water from the overhead tank closer to people's homes.



## New taps bring water close to home

Maniamma, 35, works as an agricultural labourer and construction labourer whenever she can find work. Prior to the Sujal project, Maniamma would walk a kilometre every day to the hand pump which had clean drinking water. "It would take me about two hours to fetch water because once there, you had to wait in line since everyone would use that hand pump for drinking water," Maniamma says.

After the installation of the water taps, Maniamma is able to finish her chores in less than half the time. When she needs water at night, she does not have to walk too far anymore. She is able to finish her work quickly and get some rest before going to the fields. "I boil the water for drinking, but you can tell that the water is clean and not muddy," she says.

Maniamma says what households now need is a mini tank to store water. "Then we can take advantage of the power supply and store water even during the day, and not just in the evenings like we do now," she says.



A drain from one of the houses flowed on to the street, making it not only difficult for people to walk, but also breeding flies and mosquitoes and emanating a stench. We fitted the drain with a plastic drainpipe and channelled it to the covered drainage under the ground, at a cost of Rs 1,000. Of this, Rs 400 was funded through the project and Rs 600 was contributed by the community.

Of the three working hand pumps, one is the hand pump in the anganwadi building complex that we fixed with the ball-bearing mechanism at a cost of Rs 7,000 funded entirely through the Sujal project. Because it is salty, water from the hand pump is used for cleaning purposes only. According to Bhagyamma, who has worked there for the last 10 years, the new mechanism has helped reduce the effort required to pump water. "The new handle is easy to operate and pumps up more water. This helps because we need more water for cleaning than for drinking. For drinking water, we go to the school building nearby," she says.



## CONVERGENCE

### Government and community work hand in hand

People and panchayat lead the Sujal model for equitable water governance. A crucial aspect in ensuring this is convergence, or the coming together of government funds to augment contributions from the community.

With the help of the Sujal Samiti and the community resource person (CRP), the Sujal project has brought several local governing bodies into the fold. The efforts of the Sujal Samiti and gram panchayat have resulted in a number of developments in the water infrastructure of the village. Samiti president Bharat Kumar says that the samiti meets twice every month to discuss how the village can work with the panchayat and access available government schemes. "We need to avail of government funding because we cannot afford to pay for the work ourselves. We never knew before that there are government schemes for almost everything," he says.

The samiti and the gram panchayat got Rs 8 lakh sanctioned for building a cement concrete road under the MLA Local Area Development Scheme. Of the total amount sanctioned, Rs 4 lakh has been used to build a 180-metre stretch of cement concrete road with a street light.

Thirty five individual toilets have been constructed as of March 2014, out of the 360 toilets sanctioned under the Nirmal Bharat Abhiyan (NBA). The total cost of the project under the NBA is Rs 36.72 lakh. The toilets will benefit 360 families in the village.

"These problems affect each of us in the village. If the problem is solved, everyone benefits. But if we don't step up to address it, then no one will do it for us. Even better, there are government schemes to help – all we have to do is ask for a solution."

-Bharat Kumar, Sujal Samiti president

# SUJAL SAMITI, A PEOPLE'S INSTITUTION

## The Samiti works for the common good

For the people of Thomalapally, having good water in the house meant having to walk long distances with no assurance that they would get enough for their daily needs. Things are slowly changing now.

“With the Sujal Samiti, we are addressing the village’s problems one by one. We are just getting started and we intend to go the whole way,” says Bharat Kumar, president of the Sujal Samiti.

The panchayat and the samiti in Thomalapally have managed to work together, despite their differences. “Right now we are strengthening the samiti as a people’s organisation. A big challenge is the obstruction from local political leaders in the panchayat. There may be fears that the samiti might be more trusted by the people, and hence, might become more powerful. We are raising issues that have not been sufficiently addressed by the panchayat thus far and the community realises that. We tell people that they have a right to demand solutions to their problems – because the only way the panchayat will listen is if the community and the samiti act as a single unit,” Bharat Kumar says.

Ram Babu, the community resource person (CRP) at Thomalapally has an affable personality and is easy to talk to. He is enthusiastic and committed to his role as a CRP. He sees his role an extension of his work in the past.

“I was actively involved in developmental activities in the village in my personal capacity as a social worker. I used to assist the gram panchayat to address daily problems in the village. For instance, if there was interruption in power supply due to a technical issue, I would fetch the electrician to fix it. This was perhaps why I was elected as the CRP,” Ram Babu says.

In addition to solving problems of water in the village, says Bharat Kumar, the samiti keeps people informed and is an approachable forum for the village. “It is not just water-related problems that we take up. The samiti also informs the community about schemes for housing, for toilet construction and even old age pensions. People come to us with all kinds of problems,” he says.

Ever since its formation, he adds, the samiti has become a catalyst for change. “Before, I didn’t know and didn’t care enough to approach our ward member to address the problems we faced. I now understand that these problems affect each one of us in the village – if the problem is solved, everyone benefits. If we don’t step up to address it, then no one will do it for us,” he says.

For Thomalapally, the samiti has demonstrated the advantages of the village coming together as a single unit. “If there is water being wasted, it is our water being wasted. If there is an open drain breeding mosquitoes, it is we who will suffer from diseases. And it’s not just me – starting with the samiti members, all people in the village have started thinking differently. They will not all change at once, but for the first time, we have started thinking and acting as a community. If there is an issue that needs the samiti’s attention, we take that up on priority, even if it means putting our daily work on hold,” he says.



Young people like Sujal Samiti president Bharat Kumar are the driving force behind the developments in Thomalapally