

TATA TRUSTS



THE WATER WARRIOR

The stories from Baska, Kamrup and Nalbari districts of Assam,
where crisis creates bond and tranquility among needy





GVM endeavored a holistic project based on the community knowledge and practices on water management and conservation. It was titled as the 'Participatory Diversion Based Irrigation Project', where three districts, i.e. Nalbari Baska and Kamrup were included as the area of operation. The initiative started in April, 2007.

With the financial support and proficient guidance of Tata Trust, Mumbai we could achieve a lot in terms of tangible as well as intangible outcomes by implementing this project.

PDBI is a meaningful outcome of the people's participation in development and the role of GVM is merely a catalyst only. It would not be proved without the community effort in every steps delivering the services and building the trust among the stakeholders.

We are grateful to the unbeatable community leaders and Tata Trust for making us proud to be a part of such noble cause.

Prithibhusan Deka
Director, Gramya Vikash Mancha (Gvm)

DBI is an upshot of a dream to achieve a realistic goal in community based water management tradition in the field of Assam. The draught situation of Baska district and on the other hand, the never ending havoc of water logging problem of kamrup district is an enduring crisis for the farmers. The DBI project tried to intervene in both areas to resolve the crisis amicably with the active participation of the community people. In this process, we could converge the implementation of MGNREGA and it had contributed a lot in reaching the desired goal.



Tata Trust's guidance, GVM's participatory approach and persistent effort of the community people are the main pillars behind the success of DBI in ground. It is among the success stories how people can change their fortune by their unified effort and accomplishment.

Dibakar Deka
Secretary, Gramya Vikash Mancha



1.

Rati Kanta Mandal, 50

Bimalanagar, Nagrijuli

When he posed for a photo with his wife in the baranda of his tiny house, he was so confident. The shimmering face and sparking eyes had truly represented the change in his life in recent years. He could materialize his dreams with his livelihood by the rigorous interventions made through a noble initiative.

His name is Ratimohan Mandal, popularly known as Rati da in Bimalanagar area. This enterprising farmer could bring tremendous change in his household economy by the most enviable intervention for

their village.

A resident of Bimalanagar area along the Indo-Bhutan border in Assam's Baksa district, Mandal has been able to send his three daughters for higher education to colleges in nearby towns. However, the conditions of Mandal and thousands of other farmers in the India were now so till few years back. The farmers who used to traditionally depend of the Aahu cultivation of rice had suffered a lot due to growing water scarcity, forcing them to resort to Sali rice cultivation.

The farmers in the area, who depended on the a diversion based irrigation system (locally known as dong), since 1947 had undertaken a survey on their own to map

A community mobilizer Rati Kanta with his wife who helps in his day-to-day farming activities.



the area and strengthened the condition of the dong system, which impacted positively on the people. The strengthening of the dong system in the area which is done with community participation made the water available to the paddy fields and the farmers' yield doubled.

"With the availability of water, I have gone for SRI paddy cultivation since last few years in my lands. The overall yield per bigha has increased to 20 to 25 mounds," said Mandal, who does rice cultivation in close to six bighas of his land. Mandal has also done Areca nut cultivation in about four bighas of his land.

"With the strengthening of the dong system in our area, the insecurity related to the agriculture has gone. We can dedicate ourselves fully on cultivation and at least hope that we can manage a better life," said Mandal who has also started horticulture farming. The progressive farmer had also started planting gourd, brinjal and other horticultural seeds and the yields are good.

"We were not aware about the SRI system of paddy cultivation earlier. The SRI system

of paddy is good. It increases the yield and many farmers in our area have not shifted to SRI system of paddy for good," he said adding that everything became possible due to improved dong system in the area through community participation.

Mandal who is also a ground level worker of the Diversion Based Irrigation (DBI) project, said that the diversion based irrigation system in the area has several villages in the area including Dongar gaon, Mahendra Nagar, Bimala Nagar etc. The people of the area are mainly farmers with an average land holding patter of 5 bigha. The improved dong system has impacted on about 2,000 bighas of agricultural land in the area involving not less than 200 farming families.



"With the strengthening of the dong system in our area, the insecurity related to the agriculture has gone. We can dedicate ourselves fully on cultivation and at least hope that we can manage a better life,"

2.

Hari Das Bhowmik, 60

Bimalanagar , Nagrijuli

Every morning when 60 year old Hari Das Bhowmik goes to his work in paddy field, he has reasons thank the diversion based irrigation (DBI) system that has brought smiles to the farmers like him in the Nagrijuli area under Baksa district of Western Assam, located along the Indo-Bhutan border.

The farmers in areas along the Indo Bhutan border in Assam have been suffering due to the scarce water resources in the area since ages. The traditional system of flowing the water to the area through man made canals (locally known as Dong) used to be the only

hope for thousands of farmers in the area. Like many others in the area, Mandal has also been working in his paddy fields with all these years. The dongs made of earth needed repair every now and then particularly due to monsoon, and the water flow was erratic many a time due to lack of maintenance. However, things changed recently when the people of the area could find a solution through a Participatory Diversion Based

A concrete structure at Nagrijuli to divert the water to the near by villages





“The concrete dam came as a permanent solution to the people here. it requires less maintenance or repair even during the monsoon season and villagers like me, particularly the farmers could devote more time to their fields.”

irrigation (PDBI) project launched by the Gramya Vikash Mancha, which has been working in the field of water and livelihood for a long time. The GVM helped with technical intervention to construct a concrete dong in the area to flow the water to their paddy fields as well as to their ponds and reservoirs in their backyard.

“The concrete dam came as a permanent solution to the people here. it requires less maintenance or repair even during the monsoon season and villagers like me, particularly the farmers could devote more time to their fields. The concrete dam with sluice gate ensured that we can reserve the water for dry season and release it at time whenever it is required,” Mandal, a father of three boy and two girls said.

With the availability of water, farmers like Mandal have not only shifted from Aahu rice cultivation to Sali cultivation but also used sophisticated techniques like SRI cultivation method and results are mesmerizing. The people who could hardly managed to get four to five mounds of rice per bigha earlier, could manage to get up to 25 mounds of rice

per bigha.

“I am doing Sali cultivation in seven bighas of land. I have also done teak (Gomari) plantation in two bighas of land and started a tea plantation is 14 bigha,” Mandal said adding that he also does potato, beans, gourd and other horticulture in about three bighas of land.

A member of Oronga Krishak Unnayan Samiti, Mandal said that the Gramya Vikash Mancha has also trained around 300 farmers in the area to make vermin compost, which is yielding results. “The farmers are using vermin compost in their fields and the fertilizer use is on the declining side in the area,” he said adding that the production of horticulture has also increased at least three times due to availability of water and use of vermin compost.

3.

Lal Bahadur Thapa, 45

Hastinapur, Nagrijuli

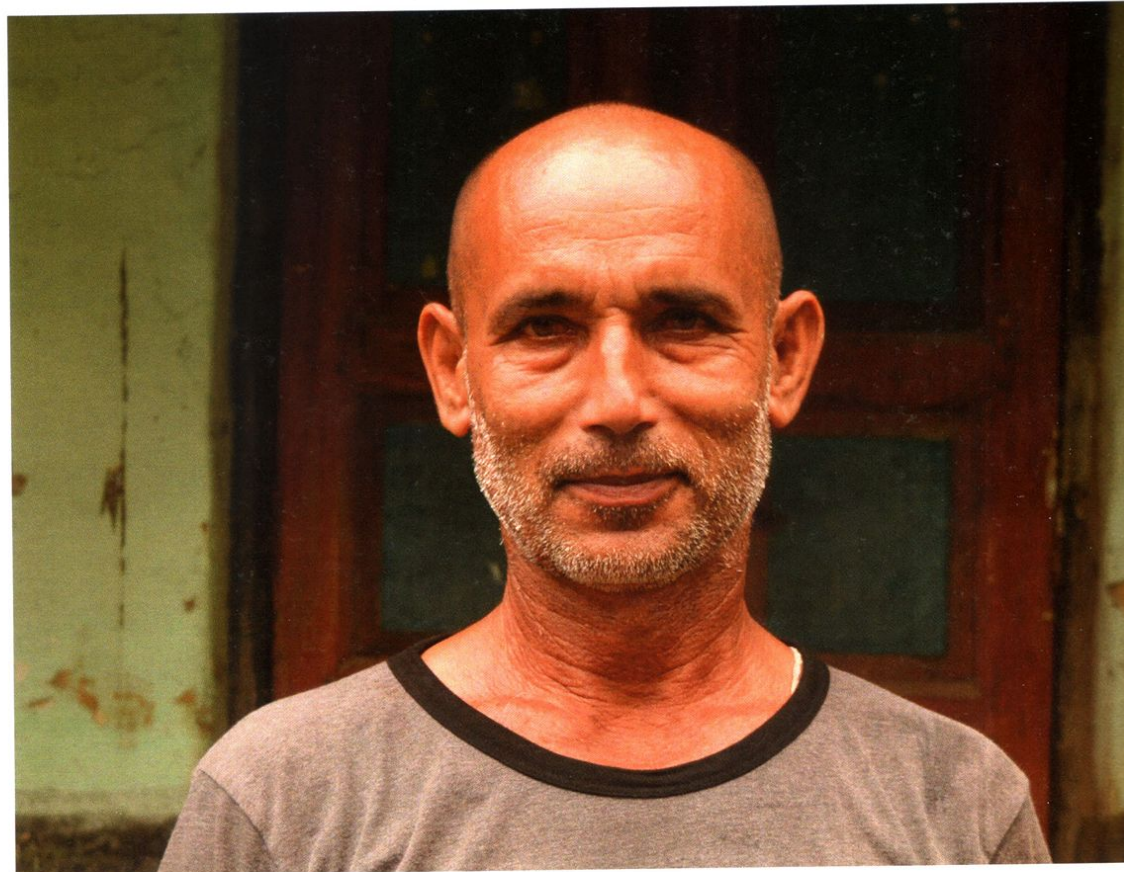
45-year-old Lal Bahadur Thapa has all praise for the Gramya Vikash Mancha (GVM), who according to him, have brought the confidence back to the farmers of the area.

A resident of Hastinapur area under Nagrijuli Circle in Baksa district of Western Assam, Thapa had been a farmer since generations. Like many in the area, he also had lost his enthusiasm to cultivate due to water scarcity.

Entirely dependent on the dong system for water, the farmers of the area used to curse their fates. The farmers had to depend on the water supplied through the 'dong' (a traditional canal system that flows to the water from rivers in the foothills of Bhutan to the paddy fields) only and it took lot of their efforts to maintain and repair the dongs, which has been existing in the area since 1940s. The agriculture became too laborious and less productive in the area, forcing many youths to leave agriculture for good.

However, the intervention by the Gramya Vikash Mancha to improve the traditional 'dong' system to make water available to the

“While the GVM spent Rs. 3.60 lakh to build the concrete dong with sluice gate and other modern technical interventions, the members of the Oronga Bornodi Lakhi Dong Bandh committee volunteered man days worth Rs. 3.80 lakh to make it successful,”



Sl. No.	Components	Achievement
1	Number of DBI Structure	37 Nos.
2	Number of Village Covered	86 Nos.
3	Number of Block Covered	11 Nos.
4	Number of District Covered	3 Nos.
5	Number of Household Covered	14,490 HH
6	Area Covered under Irrigation	19,500 Acres
7	Producer Groups Formed	10 Nos.
8	Water User Groups Formed	28 Nos.



The intervention made in last decade through DBI project has reached the commons to secure their life and livelihood.

Sl No.	Components	Amount
1	Trusts Contribution	Rs. 2,25,68,000
2	Community Contribution	Rs. 40,87,750
3	Other Donor Contribution	Rs. 84,96,600

people of the area had added new zeal to the farming community in the area. The GVM with the participation from members of the Oronga Bornodi Lakhi Dong Bandh committee made the dong a concrete one which reduced the maintenance work substantially empowering the farmers to dedicate more time to their paddy fields.

“While the GVM spent Rs. 3.60 lakh to build the concrete dong with sluice gate and other modern technical interventions, the members of the Oronga Bornodi Lakhi Dong Bandh committee volunteered man days worth Rs. 3.80 lakh to make it successful,” said Thapa, who is also a secretary of the Oronga Bornodi Lakhi Dong Bandh committee.

Thapa who owns 40 bighas of land has not started paddy cultivation in eight bighas and converted another eight bighas of land into a small tea garden. “The yield of the paddy and other horticulture has also improved since the

concrete dong. With availability of water round the year, people have started following SRI system of cultivation and people are getting over 30 mounds of yields per bigha of land,” he said.

Thapa also raised a vital point that the concrete dong has also reduced destruction of forests by the villagers. “Since my childhood I have seen people of our village cutting off trees and jungles to create space for setting up the dong. The earthen dongs are used to be temporary and the villagers used to dig a new one every year as per their wishes to bring the water. However, the concrete dong has saved the forests from further destruction,” he added.

4.

Lombodar Das (45)

Tupolia

The landscape in some parts of Indo-Bhutan border in Assam is gradually witnessing a change. Thousands of hectares of land, which used to be barren till few years back, are changing by the greenery of the paddy and other agricultural practices.

Hit by the water scarcity in the area, most of the farmers of Baganpara, Lebra, Tupolia, Uttarpar, Khagrabari etc. had almost gave up farming. Although the Assam government constructed a diversion based irrigation dam and tried to make the water available in paddy fields about ten years back, it failed due to lack of maintenance and proper planning by the government.

However, things started to change after Gramya Vikash Mancha intervened to

solve the problem three years back and upgraded the dong constructed by the government. The GVM, however, intervened with modern technologies and installed a sluice gate and followed the participatory practices by the villagers which have improved the flow of water to the area and smiles are back to the lips of the farming community.

"I have done paddy cultivation in 10 bighas of my land. Now the water I available and so there is no problem. The Dong committee follows rules to release and close the water

Small Poly-houses Prepared according to the need of environmental situation at project area



Need New Photo



"I have done paddy cultivation in 10 bighas of my land. Now the water I available and so there is no problem."

through sluice gate making sure judicious use of water to everyone," Das said adding that production have also improved as the GVM also trained the farmers to go for SRI a semi SRI method of cultivation.

"Besides, the paddy I have also been rearing piglets on the backyard and cat fish, which are helping me supplement my income," he said adding that at

least 70 villagers have gone for following SRI method of cultivation in the area to boost production and succeeded.

"We can devote more time to agriculture now. As the area could not hold the rain water earlier, the horticulture was also affected. But due to surge of ground water through the dong, now we are also receiving good yields in horticulture," he said.

Das informed that one can earn to the tune of Rs. 2 lakh a year by planting Bhut Jolokia in just half a bigha of land.

Restoration work by the Community in Bahjani of Nalbari District



5.

Gopal Boro and Bipul Boro, 45/37

Simlabari, Masalpur

“We have been using the dong system since ages, dongs are in fact part of our life since ages. However, with the concrete dong in place, people could concentrate more on the farming rather than to think about maintenance of the doing and availability of water,”



For a change, young farmers like Gopal Boro and Bipul Boro are taking a fresh interest in agriculture. The situation was, however, not like this just five years back in Simlabari area in Baksa district of Indo-Bhutan Border.

There was no water source in the area. The farmers were all dependent of monsoon rains and the young people were not interested in farming due to less production. Agriculture was on the declining trend in the area till five years back.

However, with the intervention

of Gramya Vikash Mancha, things started to improve soon. “We have been using the dong system since ages, dongs are in fact part of our life since ages. However, with the concrete dong in place, people could concentrate more on the farming rather than to think about maintenance of the dong and availability of water,” said Gopal Boro (42).

“The land in our area is traditionally good for mustard cultivation. However, lack of water was a obstacle for mustard cultivation. Now, besides paddy, people are also doing mustard seeds cultivation and yields are good,” asaid Bipul (35).

He said that people are also doing Boro rice in the area and received 18 mounds of yield per bigha, which is inspiring for the young farmers like them.

Gopal has done rice cultivation in 7 bighas of land followed by horticulture in 2,5 bighas of his land this year and he is hopeful of good yield. "I have also planted areca nut in one bigha and I am hopeful of good yields," he said.

Bipul on the other hand, has done rice in 25 bighas of land, mustard in 6 bighas of land and other horticulture like pumpkin, potato and

green vegetables in the rest 10 bighas of land that he owns.

Both Gopal and Bipul are also planning to increase cultivation to more areas by next year.



A concretized Naodara, unavoidable part of the community's water management at Nagrijuli.







This document is published under DBI Project, Gramya Vikash Mancha, Nalbari, Assam.
Concept, Case Studies & Design at Institute of Media & Development Studies, Guwahati - 22.