

Bringing water to parched Vidarbha

Madhukar Dhas

Dilasa Sanstha

“If you will, it is no dream,” said Theodor Herzl, the Zionist leader, in the last century. A reflection of Herzl’s words today is a man whose resume states his first job as a wage labourer in Pune, in the mid-1980s. Seated in his favourite spot, the *kilbil* (Marathi for chirping of birds) garden, in Dilasa’s sprawling campus in the serene village of Ghatanji in Maharashtra, Madhukar Dhas received a stream of calls. He had just been honoured with the Panidar Manus Award by the chief minister of Maharashtra, for his contribution to water management and conservation.

Those congratulating him included donors, well-wishers, his staff members and the villagers who fondly call him Madhu bhau – bhau meaning elder brother. Dilasa, the organisation Madhukar Dhas founded, is working on water conservation, in about 1,200 villages, across 14 districts of Maharashtra. Dilasa which means ‘providing strength’, does provide strength to communities by ensuring access to water. With an annual expenditure of Rs 15 crore in 2015-16, Dilasa is now poised to attain a scale of work that has never been done in their 20-year history.

The hard early life

Madhukar’s parents Nivrutti and Shanta Bai were labourers in the Kalamb taluk of Osmanabad district in Maharashtra. He was born in 1967, from his mother’s second marriage, after she ended her first marriage following a series of violent acts inflicted on her by her first husband’s family.

Madhukar too worked in sugarcane farms, poultry farms and in construction sites as a daily-wage labourer for three years, to support his collegiate education.

After completing his bachelor’s degree in arts from Kalamb in 1989, he joined Janiv Sanghatana of Pune and worked for the rights of marginalised in rural areas. Madhukar worked in Beed district till 1990 and received a salary of Rs 300 per month. Later, promoted as a project coordinator, he was assigned work in Yavatmal district, with an additional incentive of a cycle and a marginal increase in salary.

While working in Yavatmal, he met Vijaya, a colleague working for Vanchit Vikas - the registered body of Janiv Sanghatana - in Patanbori. Meanwhile he learnt that in Vanchit

Vikas new recruits were being paid more than what he and his colleagues earned. This pricked Madhukar, head of the Vidarbha region by then, and he decided to look for better opportunities. By this time, Vijaya and Madhukar were married, and he needed a stable income to support the family.

He resided in Ner, which was equidistant from Yavatmal and Amravati, the districts he was in charge of. As both of them were working in non-profit organisations, they had many visitors to their house. The hospitality expenses were not reimbursed, adding strain to their meagre income. When their daughter was born, Madhukar started to feel the pressure of financial responsibility mounting on his shoulders.

Through the organisation of Medha Patkar, with whom he shared a good rapport, he received a fellowship. The fellowship, started by Jan Sahyog Trust, brought Madhukar Rs 1,200 for progressive work in the rural development space. Vilasrao Salunke too offered him a Paani Fellowship in 1995, *paani* meaning water. Madhukar's association with Janiv took an abrupt end, when the organisation delayed his salary for three months in 1995, citing an audit in their Pune office as the reason. Madhukar decided at that very moment that if he ever reached a stage where Janiv was, he would ensure that each of his staff members received payment as per a fixed timeline. It has been a matter of pride for Dilasa that the bills submitted by the employees are paid within a week.

Genesis of Dilasa

"I know how hard it is not to get a salary for three months, and to keep taking care of the family without money. I rented a house, with the condition that I would be able to pay rent only after three months. I searched in several places, from Yavatmal to Ner, to Pusad; finally I found a place in Ghatanji. That is how Ghatanji became my work centre," he recalled.

Vijaya's work involved visiting the red light area of Pusad, to understand the problems of commercial sex workers, and the impact the surroundings had on their children. She found out that young girls were sold off to other cities and boys were either encouraged to work as pimps or as menial workers in the same locality. Most women including mothers, aunts and grandmothers were involved in this trafficking trade. The situation disturbed Vijaya and she discussed it with Madhukar. Madhukar was thinking of starting an organisation, where he would have the liberty of working on issues that mattered the most to him. He had grown disillusioned with the idea of mere mobilisation without any concrete agenda. He narrates an incident when he brought a group of people together for a protest at the block development officer's (BDO) office in Ghatanji. By the time the protest march reached the office, there was only a handful of people left. None of them had any interest in the cause.

Madhukar's wish and Vijaya's concerns led to establishing Hasre Gharkul – meaning happy home – an orphanage for the children of commercial sex workers they had surveyed and

identified earlier. Madhukar however had different ideas then about his role in the development sphere. Therefore Dilasa was registered as a multipurpose society in September 1995, with Madhukar Dhas as the director and Vijaya as the secretary and a total of nine workers. Today Dilasa works with a total of 191 full-time workers, 11 part-time workers and ten watershed experts.

Working on watershed development

Dilasa started its work in six villages of Ghatanji administrative block. Madhukar had already been working as the head of Vidarbha region at Janiv Sanghatana for more than two years when Dilasa was founded. Vidarbha region comprises of the Nagpur and Amravati divisions of eastern Maharashtra, comprising of 11 districts. Seven of these districts including Yavatmal come under the tribal belt. The area of operation of Dilasa, falls in the Yavatmal district of Amravati division. Because of the Ryotwari land revenue system of the British era, land holdings in the region are very small and scattered, making agriculture an unviable livelihood for the majority.

Cotton, which was widespread in the region, left the farmers poorer, as the input cost became much higher than income. Lack of capacity to use different modes of energy for pumping water for irrigation led to widespread distress among farmers, highlighting the importance of small irrigation structures required for mitigating such distress. Dilasa worked in association with the government on a watershed management project. However, due to widespread corruption, Madhukar had a tough time receiving payments for his work. He knew he had to promote an ecosystem of supporting organisations across Maharashtra.

By the end of 1997, Dilasa had a presence in Osmanabad, his home district. With the help of a friend, they were working on a sponsored programme for women and child development. It was here that they started receiving specific projects for tribal development.

While working in Janiv, Madhukar had attended a workshop by Vilasrao Salunke, fondly remembered as *paani baba* (water man), a champion of harvesting and equitable distribution of water. Salunke asked Madhukar to work on water conservation in the localities he was working in. Madhukar was deeply moved by his persona and decided to emulate him in whatever way he could.

It was a turning point when Madhukar stumbled upon phad, a traditional diversion-based irrigation (DBI) in the village of Dhangarwadi. Phad is now considered the perfect method for low-cost irrigation. Phad was replicated in six blocks of Yavatmal district using a grant from Tata Trusts under its DBI programme. Subsequently Madhukar went on to revive 23 phads in Yavatmal, Nagpur, Amravati and Nanded districts.

Around this time, Mansoor Kureshi, his ally since 1998, observed another model called doha. The structure is referred to as doh in Marathi. This provided scope for water

conservation through groundwater recharge. Madhukar immediately popularised the doha model. In the aftermath of the drought in 2015, Marathwada became a hub of their work. In 2015-16, Dilasa completed a total of 70 doha models in Beed and Osmanabad districts of Maharashtra.

In 2016, Dilasa came up with the idea of a drought-proof village by constructing dohs, considering the devastating effect droughts in general have. What began in six villages has reached more than 1,200 villages in 14 different districts of Maharashtra. They also expanded the work to Anantpur district of Andhra Pradesh, where they could not succeed much and hence slowly moved out.

Working method and thematic spread

Dilasa now works primarily on agricultural development through irrigation. Mansoor Kureshi, who is the architect of this programme, said, "Any significant change in rural sector can be done only by reducing dependency on monsoon. Only 12% area has assured irrigation now, meaning it can thrive even without rains, the rest of the places depend on the monsoons every year. Only by ensuring availability of water we can talk of agriculture and livelihood. I see water as the only way out."

Their work spanned roughly two decades in diverse sectors. The rapport that Madhukar had developed with the community in the '90s while working for Vanchit Vikas enabled him to find out their needs. He frequently visited these villages, predominantly tribal, to understand their concerns - right from seeds, to agricultural practices, to water and to methods of irrigation.

Each of the thematic areas Dilasa has worked on is elaborated below:

Natural resource management

Dilasa worked on a watershed development project in 1995, in six villages of Ghatanji block, with financial support from District Rural Development Agency (DRDA), Yavatmal. Madhukar's prior experience with Paani Foundation helped them complete the project successfully.

As the organisation entered its third year, it got funding from Department of Science & Technology (DST) for promoting women-centric watershed development in Vasari and Yewati villages. They formed water user groups and simultaneously started working on other themes in the said villages.

The watershed development work in two villages culminated in a big project by Aga Khan Foundation (AKF) to implement similar work of constructing water harvesting structures and forming water user groups in 20 villages of Ghatanji. The half-yearly reviews of the works at the AKF office broadened their understanding of the development sector through

interactions with big NGOs such as Professional Assistance for Development Action (PRADAN) and Aga Khan Rural Support Program (AKRSP).

By the time the AKF project ended, Dilasa got two more watershed development projects under participatory irrigation development and management (PIDM), which were coordinated by Mr Khadse, a mentor for Mansoor and Madhukar.

“I can never understand the processes of government projects. We still have to receive Rs 3 lakh for the work we did in 2003. That was when I decided that I would not take up big government projects, but confine ourselves to CSR activities,” said Madhukar on his experience with PIDM.

In 2009, Dilasa was able to secure a NABARD project on watershed development in Pahapal cluster of Pandharkawada block in Yavatmal district. They had a fairly well-established name in the field of watershed development by then. The project was designed for carrying out area treatment in 2,500 ha of land in three villages namely Pahapal, Kegaon and Wadner under Pahapal watershed cluster. Mansoor handled the project, giving Madhukar time for fund-raising work.

“Although our presentations were not highly sophisticated, we could convey the enthusiasm we had for our work; that helped us gain goodwill from the donor agencies. Madhukar was down to earth. For instance, when he visited villages he would start clearing litter on his own. His communication was brilliant. He was a very good host and knew how to make guests welcome,” Mansoor fondly recalled.

The major activities carried out included farm bunding, contour bunding, agro-horticulture development, promotion of improved agriculture, water harvesting structure, livelihood development, animal husbandry & agronomic interventions. All the projects were implemented with the active participation of the community.

Eventually Mansoor realised that despite repeated efforts, watershed development was not yielding results in solving problems related to irrigation or drinking water. He was not too convinced of the work they were doing and discussed it with Madhukar. They wanted to do something that would not only create an impact, but also bring them to a point where they could choose projects. By the end of 2014, the duo decided to stop working on watershed development.

Another major work undertaken in this theme was that of construction of farm pits, of about 10feet depth and 5feet radius. Rajani, which Mansoor considers to be an ideal village, has 70 such farm pits. The village has also moved to the next level of using sprinklers for irrigation. Dilasa donated two sets of diesel pumps and sprinklers to the village. These are rented to farmers on an hourly basis, acting as a source of income for the landless, to whom the pumps were given. The same model has been adopted in most of the villages where farm pits have been constructed. Utilising the funds from various donors, Dilasa could

successfully prepare more than 500 such farm pits, in the entire district of Yavatmal. A farm pit constructed on the land of an individual farmer, with prior permission from the panchayat, is used for storing rain water and then is extracted by the farmer during kharif or rabi, using either self-owned diesel pumps or by hiring the ones donated by Dilasa. With water available for irrigation, this scheme has had a huge impact, as farmers now get increased yield from cotton.

The purchase of the sprinkler set has been done on a subsidy model, where a part of the amount was subsidised by the government and Tata Trusts and the remaining was borne by the farmer. Some of the farmers have deepened these farm pits on their own personal expenditure. They now inspire the others to follow suit, by slowly moving towards, vegetable cultivation using drip irrigation. Mansoor believes that only when they are able to reach out to all of these farmers with drip, will their intervention be holistic.

Forest rights campaign

Dilasa's forest rights work in tribal areas got a boost with an Oxfam project in 2011. As Dilasa had already worked with these communities on a host of themes, their presence was widespread in Yavatmal district. This project provided Dilasa with an opportunity to work on Community Forest Rights and Joint Forest Management (CFR and JFM respectively). They conducted awareness meetings on government entitlement schemes such as FRA, BDA, and PESA & MREGS through volunteers in ten villages each in Zari, Ghatanji and Jivati blocks.

Mansoor came across the doh model, while conducting feasibility surveys of phad irrigation. They had to map an entire river for deciding on the point from where water was to be diverted. He found that some dried-up rivers had a spot that acted as a perennial source of water. This was called doh and was the shape of a saucer. He further modified it to be used as a rainwater harvesting structure. Madhukar found the idea interesting. The model was tested and it led to a rise in the water table and solved the drinking water problems in the villages affected most by the drought. Doh is an eco-friendly and low-cost water harvesting structure built at the bed level of a stream. This enables storing rainwater below ground level, without the need for a cement structure, leading to recharge of ground water. It is constructed at intervals of 1000m in a stream of 6m width. This has received major acclaim in the first year of its operation, with Dilasa completing roughly 200km of doha model across Maharashtra.

Bringing community to participate

Madhukar undertook a unique experiment of people's participation in desilting a dam in Jaffrabad. In 2012, Dilasa was approached to execute drought relief activities in villages of Jalna district. Mansoor and Madhukar reached the site and decided to conduct a massive desilting campaign of Jeev Rekha Dam. This was a community-based work as Dilasa provided only the machines required for the work. The local farmers shared 75% of the cost and participated with great fervour. 1,15,000 tractor loads of silt was removed, which were used in the farms. This yielded great benefits both for the farmers as well as for Dilasa, as the successful operation made Dilasa popular.

The following year Dilasa conducted a similar programme in Kapasi and Mahan Dam in Akola district. Mansoor firmly believes that such projects should be conducted across all the reservoirs of Maharashtra, at a regular intervals.

About 30 years back, Dhangars settled in the village of Mehndala. Their hamlet is presently called Dhangarwadi. In 2005, International Water Management Institute (IWMI) and Tata Water Policy Program asked Madhukar to conduct a study on how the Dhangars fulfill the water needs of their sheep herds in summer. He documented the entire process in a video that portrays their water conservation methods.

Madhukar came upon a farmer using the earthen embankment of a minor irrigation structure to irrigate nine acres. It was a traditional technique of storing water in upland areas and using gravity to irrigate lower lands. Madhukar took Mansoor to the village and suggested further changes to make it more efficient. The duo handed over a proposal to replicate this, to Ganesh Neelam, who was then in charge of the Central India Initiative of Tata Trusts. This was approved and initially two low-cost masonry structures were created to store water. The outcome was encouraging as it led to an increase in irrigated area from nine acres to 72 acres and assured irrigation for kharif as well as rabi crops. Also, being a DBI system, there was no need for energy use, unlike the lift irrigation (LI) systems.

Dilasa was then asked to conduct pilots on phad in two more villages. They decided to use pipes instead of canals to take water to the fields of individual farmers. Mansoor clearly remembered how in the middle of the night they got a call from the village, saying that water was flowing through the pipes. The villagers rejoiced that with the water, they could grow two crops a year.

Following this, Tata Trusts gave a grant to conduct a study on the feasibility of phad irrigation systems in the adjoining villages. Mansoor and Madhukar identified 23 villages. Prior to this, they had been given a grant for construction of phad in six tribal villages. During the survey they identified 150 potential sites. However Tata Trusts could not fund all of them. So Madhukar decided to approach other donors. He received funds from Dasra, an

organisation that connects NGOs and funders, among others, to complete the list they had in mind.

In the naxal area of Gadchiroli, Dilasa secured irrigation for 948 households. Dilasa came to be identified with phad. Madhukar knew Dilasa could not rely only on phad since it is a location-specific intervention. Reviving dohs was to be the third turning point for Dilasa, in a span of twenty years.

Farm interventions

Identifying Dilasa as a key player in transforming the tribal face of Maharashtra, Tata Trusts handed over an extension of its Baliraja Krishi Sudhar Prakalp – that worked towards improving farmers' lives – in Yavatmal district. Madhukar started creating leaders within the community, to guide the farmers in following best agricultural practices. This included soil testing, building farm bunds, seed distribution and preparation of organic manures. The project was executed in 22 villages in Ralegaon and Zari blocks of Yavatmal district. Dilasa also formed women SHGs under this programme and encouraged them to take up income generation activities like goat rearing and dairy farming.

With funding from United Way Worldwide, Dilasa got 750 tribal families in 19 villages to start kitchen gardens. The tribal households grew green & leafy vegetables including vetches, fenugreek, coriander, chilli, beans, onion, and cabbage.

The krishidoot project of Tata Trusts brought Dilasa to work with nearly 2,500 farmers on integrated pest management (IPM). The krishidoots or agriculture support cadre, were trained at district level in Akola, and then sent to their respective villages. They conducted survey of kharif and rabi crops so as to provide assistance to farmers on pest management.

Pata, a term used very frequently by Madhukar in his discussions, is a traditional method of maintaining the nutrient basket of a farming household. It is a practice that faded with the advent of Green Revolution. Green and leafy vegetables were either purchased from the market, or slowly made their way out of the diet of these farmers. Madhukar decided to ensure basic food security for the farmers. Pearl millet, maize, sorghum, black gram, green gram, okra, cluster beans and cow pea were planted together in successive rows, mainly during kharif, on a small patch of land, along with the cultivated cash crop. Dilasa provided 11 varieties of seeds to the farmers at a nominal cost. This project reached roughly three lakh farmers. Farmers still appreciate Madhu bhau's role in bringing these crops back into their diet.

Being closer to the tribal communities, the organisation realised the importance of traditional seeds, especially in the aftermath of Green Revolution. The traditional seeds had slowly been replaced by hybrid and GM seeds in the last two decades. Using pata, they were

able to secure seeds of some native vegetables. Dilasa set up a seed bank and initiated conservation of native breeds of rice, green gram, pigeon pea and millets among others. The seeds are being conserved using traditional storage bins and earthen pots. Dilasa trained village women in making storage bins made of bamboo. This marked the revival of community-based agricultural practices.

Saving & credit programme: self-help groups

Although Dilasa has been working on mobilising community through SHGs since its inception, with funding from Axis Bank Foundation, Dilasa is promoting livelihoods through SHGs, along with twelve partner organisations. About 100 SHGs have taken up income generation activities such as garment manufacturing, goat rearing, rearing of milch cattle, vegetable vending, besides grocery and stationery shops. These SHGs avail of loans from Axis Bank.

Addressing farm distress

Dilasa established a farmer support centre, to help the families of farmers who had committed suicide. This year, they carried a news story, urging farmer families in distress to contact them. Supported by Arpan Foundation and Caring Friends, the families are provided with ration kits, bicycles for the wards and livelihood support in the form of dairy animals and the like. Also, a revolving fund of Rs 53 lakh has been provided to 643 families of deceased farmers.

After the hailstorm in Vidarbha and Marathwada in 2014, Dilasa conducted a survey to estimate the losses. With grants from various organisations, Dilasa carried out relief work in 71 villages. Tata Trusts supported drought relief work that included farm preparation for next season, housing shed, temporary shelter, roofing sheets, seed supply, supply of food kits and educational material for children.

Dilasa has conducted several short-term drought relief measures including distribution of food ration, medicine kits, fodder and clothes. In order to reduce the drudgery of rural women who had to carry water from distant sources, Dilasa introduced Wello Wheel Drums which can contain 60 litres of water and could be easily pulled by a girl of 12 years. This helps in reducing the working hours of rural women. A simple intervention that helped many farmers was that Dilasa helped them procure food grains from PDS shops as farmers did not have cash to pay in short intervals of time. Later farmers paid Dilasa back.

Sheltering children

The initial work that Vijaya and Madhukar had done in Ner, Pusad, led to their increased interaction with commercial sex workers. They mobilised funds for setting up a shelter for the children of commercial sex workers in Pusad. As mentioned earlier Hasre Gharkul was established in the early '90s, with funds received from Stichting Geron, Netherlands. The facility has 65 children, who are sent to school and provided with boarding and lodging facilities. Madhukar chose to put his daughter too at the centre, for a year, as he sees all the children as his own. The children call him baba, and Vijaya ayi, that translate as father and mother respectively. So far 11 children have been married. Dilasa continues to support the married children's families in some way or the other. Dilasa succeeded in securing the future of the children once they finished their studies. However, due to high risks such as interference of goons and children running away, Madhukar decided to continue the centre only for the needs of the existing children. With Stichting pulling out, the centre is being run with financial support from Sant Gajanan Maharaj Sansthan since 2010.

Evolution of Dilasa

A general body with 16 members governs Dilasa, appointing executive and management committees. The latter takes care of the day-to-day operations of Dilasa.

As Dilasa's work expanded, there was a need to coordinate the network of village-level volunteers better. After Mansoor joined, the technical aspects of irrigation interventions improved.

Amol handles the implementation of doha. With this, Madhukar was slowly out of project implementation and turned his attention towards fund raising. Subhash Mankar who has been associated with Dilasa for a decade, handles accounts.

Madhukar has appointed his brother Suhas, as the coordinator for Axis Bank Foundation's SHG project. Though Vijaya is not actively involved in the day-to-day works of Dilasa like she used to, she continues to be a part of the governing body.

Staff who have been with Dilasa for a long period are the backbone of the organisation and Madhukar ensures that they get the best possible remuneration. Rather than getting professionals from outside, they engage in capacity building of these employees. To the top brass of the organisation, Dilasa has provided personal vehicles to facilitate easy and timely site visits.

Madhukar felt the need for infrastructure. He realised that he could not go on getting funds and channelising them to the poor. The role that a system plays became clear to him. With a

grant from Cordaid Netherlands at the start of the millennium, they built a small office in a land purchased near Ghatanji.

Madhukar keeps a close watch on accounts. He improved their accounting system after asking others for suggestions. "We have an internal audit system. We maintain transparency," he revealed.

In the last one year, they have worked on several projects in a large number of villages, the largest so far. So Madhukar plans to set up a new office in Beed to handle the operations of the Marathwada region.

In the last five years, the workload has risen faster in comparison to the human resource. In the year 2015, in place of targeted 30 dohs to be completed, they completed 70. This led to serious work pressure on many of their field workers. This year too, they are planning to go ahead with 125 dohs, developing a special workforce to be named as Doh Commando. These 200 villages that they would work in by the end of the next year, would also mark their interventions in the already successful MGNREGA work demand programme.

The founder director Madhukar has come a long way, in making Dilasa the prominent non-profit organisation in the Vidarbha and Marathwada regions of Maharashtra. The work has increased so much that he has no time for his family commitments. He projects Mansoor in several events and forums, so that the public associate their work with Dilasa and not him.

About Madhukar Dhas

- From his modest beginning as a daily wage labourer, he rose to be an expert in water management
- Brought water management and conservation interventions to 14 drought-hit districts of Maharashtra
- Reviving traditional phad and doha models of water harvesting, he brought water for drinking and irrigation to drought-affected Vidarbha and Marathwada regions of Maharashtra.
- Helped families affected by farm distress suicides, through a farmer support centre
- Improved the nutrient basket of farm and tribal households by introducing kitchen gardens and the traditional pata.

NOTE: Before the book was published, Madhukar passed away in December, 2016, at the age of 49.

Dilasa Sanstha
Istari Nagar, Ghatanji
Yavatmal
Maharashtra
PIN: 445301

Phone: +91 7230 277537
Email: dilasa1@gmail.com

<http://www.dilasa.org>

Written by Bikalp Chamola and Vivek Kher