SECURING WATER AND LIVELIHOODS IN A CHANGING CLIMATE: through community led watershed development in a semi arid drought prone region of Maharashtra

87 villages across three blocks of Ambad, Bhokardan and Jafarabad in Jalna district of Maharashtra are a part of the PPCP project (Public – Private – Civil Partnership), a joint effort between the Government of Maharashtra, Hindustan Unilever Foundation (HUF) and Watershed Organisation Trust (WOTR).

Since the inception of this project in 2014, the journey of helping village communities to judiciously use its resources and become resilient in the wake of changing climate has been long, stimulating and challenging for severe drought affected villages of Jalna district.

The watershed development work carried out under the MGNREGA scheme by the collective efforts of various stakeholders reaped huge results. 74% of the planned developmental watershed work has been completed until October 2016 in all the villages where this project is being implemented. This year, not only did it provide an alternative livelihood option to villagers when no agricultural work was available but due to the adequate rains, 8,045 farmers have benefitted from the watershed structures constructed by them.

Now, the watershed dwellers have become aware of their relation to their environment and its impacts on their lives. They are becoming a part of their own
development through the social disciplines, participating in their land use pattern and through the contribution of voluntary labour.

The impacts of watershed development can be directly seen in agriculture. Farmers can harvest both in Rabi and Kharif season due to the availability of water. Some farmers have changed their cropping pattern and have adopted micro irrigation methods to use the water resource judiciously. Also, as employment opportunities are available in their own village, outward migration is showing declining trends in comparison to the previous years. Women are stepping outside their homes and are trying to establish their own business. For e.g. in Vadod Tangda, women have registered their farmer producer company (FPC) whereas, in Pagirwadi, capacities of 150 women have been built to start their own entrepreneurship too!

In the meantime, one must keep in mind that climatic events cannot be altered. The monsoons have blessed these villagers this year. However, we do not know what lies in the future! Our combined efforts are helping villagers develop capacities to mitigate the effects of these phenomena.

The fourth volume of the PPCP newsletter majorly features impacts of watershed development work on various components encouraging the progress of individual farmers and their villages.

<table>
<thead>
<tr>
<th>Key Performance Indicator (KPI)</th>
<th>Cumulative achievement (Till Sept. 2016)</th>
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<tbody>
<tr>
<td></td>
<td>Ambad</td>
</tr>
<tr>
<td>Number of village institutions formed (SHGs, Farmer's groups, VDCs, SMS)</td>
<td>145</td>
</tr>
<tr>
<td>Number of persons who have undergone trainings and exposures</td>
<td>2,653</td>
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<tr>
<td>Area treated through soil and water conservation measures (ha)</td>
<td>4,549</td>
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<tr>
<td>Water potential created due through soil and water conservation measures (Million Lit)</td>
<td>4,272</td>
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<tr>
<td>Water potential due to various demand side interventions adopted (Million Lit)</td>
<td>230</td>
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<tr>
<td>Change in agriculture productivity over the baseline (ha)</td>
<td>1,454</td>
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<tr>
<td>Increase in agriculture production over the baseline (Tonnes)</td>
<td>524</td>
</tr>
<tr>
<td>Person days generated due to project work</td>
<td>246,943</td>
</tr>
<tr>
<td>Household Income enhanced (Rs. in cr)</td>
<td>3.84</td>
</tr>
<tr>
<td>Number of farmers benefitted due to project work</td>
<td>3,306</td>
</tr>
<tr>
<td>Number of SC/ST members benefitted due to project work</td>
<td>363</td>
</tr>
<tr>
<td>Number of women members benefitted due to project interventions</td>
<td>810</td>
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CAPACITY BUILDING

For efficient implementation of various developmental activities; strengthening the abilities, skills and competencies of people is extremely crucial. The feeling of ownership and teamwork are the driving factors for the success of an intervention activity.

“I have seen my village undergo a transformation! Not only has the village benefitted immensely from MGNREGA but the mindsets of our villagers have also changed”.

Balasaheb Belge, 35 years

The leadership of an educated Sarpanch has helped in the transformation of Deshgavhan in less than a year!

Since 2014, WOTR has been implementing its activities in Deshgavhan, Ambad. However, most of the villagers did not come forward and participate in the various activities being implemented. The situation drastically changed after the 2015 Sarpanch elections. The new Sarpanch, Mr. Belge believed in the project activities and collectively with our social development officer convinced the villagers on the importance of watershed development work. In early January 2016, the MGNREGA work began and after its completion on the monsoon's arrival, the villagers collectively earned Rs. 20 Lakhs. Moreover, according to the provision under MGNREGA, if more than 60% unskilled labour is involved, the grampanchayat can choose activities of 40% skilled labour. The villagers of Deshgavhan choose to avail eight cattle sheds and a community well under this provision.

The water table of the wells in the vicinity of the watershed development has increased in comparison to the previous years. Earlier, water was available at 90 ft. from the ground level but now it is available at 50 ft. itself! Also, the villagers of Deshgavhan have completed 50% of the watershed work and have started four self-help groups (SHGs) in a short time span. The villagers are extremely happy to see their village prosper and are motivated to make Deshgavhan a water secured village.
“We have got each other’s back as we embark on this entrepreneurial journey”.

Usha Ithape, 32 years

150 women of Pagirwadi are vowing to make their village self-sufficient!

Initially, only four self-help groups were formed at Pagirwadi. Over a time frame of six months, the number increased to 11, resulting in 150 women being a part of these groups. This was made possible because of the combined efforts of the wasundhara sevika, social development officer and the desire of these women to become independent.

“In the monthly meetings, we lend internally to our members. Depending on the need and the urgency of the situation, we unitedly decide whom the money should be given and keep a written record of the same. Besides that, we get an opportunity to discuss and take required actions for the various social issues that affect us. The exposure visit to Mhaswandi village, Ahmednagar instilled the confidence among us to make our village self-sufficient. The training received at Darewadi also enabled us to understand the objective and the functioning of the self-help groups. Importantly, it created a platform to stand on our own feet and to break free from the social taboos of the society.

Sharmila Tangde (member of an SHG) added, “The money lenders charge a huge interest rate but I could borrow Rs. 5,000 for my girl’s marriage without any hassle and at a lower interest rate from the self-help group. I strongly feel that our strength lies in our unity. As long as we are together, we can achieve anything”.

Meeting of Self-Help Groups in Pagirwadi
Watershed development plays an important role in mitigating weather induced risks, building resilience and strengthening adaptive capacities. Simultaneously, it provides an alternative livelihood opportunity when no agricultural work is available and positively impacts the production of crops when the villages are blessed with a good monsoon.

“It was because of the watershed development work we had a livelihood option for the summer season and could repay a huge portion of our home loan!”.

Digambar Shejol, 30 years

When no agricultural work was available, seven adults from the Shejol family were employed under MGNREGA!

Digambar Shejol's family hails from Wadala, Jafrabad block. Farming is their main occupation. However, as Marathwada was hit by drought for the last three years, the villagers found it extremely difficult to sustain in such a situation. Outward migration became a common phenomenon in this region. Digambar's two brothers migrated to Aurangabad in search of livelihood opportunities in 2015. But, the money earned was not sufficient to sustain a family of 10 members as more than half of their income was spent on their expenses.

In January 2016, under the MGNREGA scheme, this family consisting of seven adults, decided to be a part of the implementation of watershed activities in their village. Every member earned Rs 181 and together the amount accumulated to Rs 1,267 per day. Not only did his brothers come back but also the family could earn in the summer.

“This work has made it possible to repay a large amount of loan taken to build our house. Otherwise, we would have taken at least two years to pay back the loan. On a personal note, I now understand the importance of watershed development. I can see that after the rains in June, the farm bunds constructed by us are proving to be extremely beneficial for the farmers. Earlier we took up the work as a way of earning our livelihood but now I see the larger picture”.

Shejol Family
"I am optimistic of having enough water for the Rabi season now".

Hazrat Shaikh, 40 years

The stream surrounding Hazrat Shaikh and his friends' farmland is helping to increase the water table of the wells in the vicinity due to the desiltation work carried out.

Hazrat Shaikh from Chinchekhed, Ambad wished to pump more water from his well but as the water table was low, he was left helpless. His other friends in the vicinity suffered the same fate. Desilting a stream running between their farmland could help them immensely to increase the groundwater level. However, the high cost associated with it was a major deterrent. After the project team proposed to contribute 80% of the total desiltation cost, they happily accepted the offer.

“After the rains in June, the entire stream was filled with water. Soon, we started noticing the rise in the water table of our wells. Even our friends within a kilometre radius of this stream are noticing a rise in the water of their wells. We have decided not to extract water from it because it will hamper the groundwater recharge. Now, there is enough water for the Rabi season too”.

The stream running between Hazrat Shaikh’s farmland is filled with water after the desiltation activities
AGRICULTURE

Agriculture is a lifeline for communities living in resource fragile drylands. However, the availability of water for agriculture and allied activities is a major hindrance for these communities. Watershed development structures have proved to be a unique solution to store water and prevent the soil from getting eroded. Timely guidance for adopting climate compatible agricultural practices, efficient use of water, effective farmland management also plays a crucial role in enhancing the agricultural output.

“I consider myself grateful for the timely assistance received from the Project team otherwise, my dream of cultivating pomegranate would be futile”.
Mohan Pralhadkad, 40 years

The guidance provided by our agronomist has helped Mohan cultivate pomegranates without any difficulties!

Mohan planted pomegranate in 2013 on three acres of his farmland in Khasgaon village, Jafribad. As years passed, he found it difficult to look after the plants and could merely keep them alive for two years. Mohan knocked on the doors of various agriculture specialists for help; however, no immediate help was available from them. Even the farmers in his vicinity perceived that the plants would not give any returns. In January 2016, WOTR’s agronomist, Anil Wadhekar assured him of saving his pomegranate cultivation.

“I trusted the timely advice given by the agronomist and started acting on it religiously. Previously, the fertiliser and the water given to the plants was not appropriately reaching the roots but after we adopted drip irrigation the situation has changed. For pruning, we called experts from Solapur to help us. We could reach out to them only because of the relationship they shared with the project team. I would like to confess that I had seen many television shows that preached organic farming but did not follow it. However, we have adopted these practices after we were explained the benefits of the same by the project team. This has proved to be extremely cost effective. Most importantly, I do not have to wait for Anil sir to come visit our farm; he is extremely friendly and always available to solve our queries over the phone. I am confident on getting a good yield and a substantial profit from pomegranate”.

Mohan’s pomegranate farm
“I never had imagined that I would get surplus earnings from agriculture. I intend to use them to start a small business in the nearby town of Dhawada or Walsawangi”.

Sachin Kothalkar, 24 years

Nalla deepening has enhanced the agricultural output after the monsoon this year!

The severe water scarcity faced by Sachin had negatively affected his agricultural yield in Wadhona village for the last three years. But, this summer through the PPCP project, nalla deepening, widening and straightening was carried out on the stream flowing next to his farmland. These activities have made water available which has had several positive effects on his agricultural practices.

“After the onset of monsoon, I chose to grow tomato on half an acre of farmland because it requires less time and is profitable. I earned around Rs. 60,000 after its harvest in October. I noticed an increase in the water in my well too. On the remaining two acres, I have planted cotton crop which would give me returns of about Rs. 60,000 - Rs. 70,000 in the near future.

Another positive impact of the various drainage treatment activities is that, I have the freedom to choose my crop for Rabi. Every year I used to take chickpea in Rabi season which would need less water. On the other hand, this year as water is available in my well, I am growing maize.

My agriculture is benefitted not only by the availability of water but also by the guidance I received from WOTR’s agricultural experts, on the use of organic manure through vermicomposting and other organic formulations such as Dashparni ark, Amrit pani. Their use has reduced my input cost considerably and my dependence on agrochemicals.”
Alternative livelihood opportunities help to sustain in the changing dynamics of the climate and the unpredictable circumstances. But seed funding plays a crucial role to kick start micro enterprises. This help is offered to the villagers through our participatory nature of monetary support.

“We have never seen our disability as a problem; every day we strive to achieve more”.

Aruna Kharat, 28 years

Aruna Kharat is optimising the existing infrastructure of her husband's shop for an own venture.

Aruna and Shivaji Kharat migrated from Padmavati, a small village to a town, Walsawangi in search of better livelihood opportunities. An incidence of a short circuit set their rented grocery shop ablaze in 2009. Having neither any adequate financial resources nor any farmland to rescue them, they had to knock on the doors of their relatives for help. The couple started afresh after a year of helplessness and the monetary funds gathered from their loved ones.

“WOTR came in our life in January 2016. Our voluntary contribution of Rs 4,000 and the grant of Rs 15,500 gave us the required seed funding to expand the items sold at our shop. I sensed the market demand and narrowed down to sell women's accessories in addition to the already existing grocery shop.

It has just been six months since we have expanded our business. However, our earnings have considerably increased. Earlier, I would earn Rs. 100 daily as a tailor. Now, I get at least Rs. 200 - Rs. 250 every day. Moreover, my interaction with the women of this area has grown. I am helping my husband get more customers for his grocery shop too. Most importantly, it was only because of the grant received that we could expand the venture. Otherwise, it would have been extremely difficult to do it on our own. Now, we are in a position to save money for the education of our son too.

My husband and I have never let our disability hamper our progress. With the circumstances that we have gone through in our life, we have become stronger. I consider myself fortunate to have married a person like him, who pushes me to achieve my dreams. I am a proud degree holder of Bachelor in History, which I completed after marriage. We look forward to that day when we would have our own shop on the main road of Walsawangi".
Uncertain health conditions made Dadarao a liability to his family. However, a flour mill is helping him change this situation.

Dadarao suffered from kidney failure at the age of 19. Having three more mouths to feed - his mother, wife and his child - he found it difficult to sustain in such circumstances because of his illness. His altruist mother donated her kidney to him. However, every week Dadarao has to visit the government hospital in Bhokardan to get dialysis done as the kidney transplanted stopped functioning. To add to his misery, he had to sell his land because of the heavy sums of money borrowed from the rich farmers.

“It has been four years, I am living with this illness. Since then, I could not contribute towards the family income at all. This year, in the month of January, some women from our village approached us and pitched the idea of establishing a flour mill. After I came to know that I would have to only contribute 15% to the total cost, I readily agreed. Earlier, “My wife was the sole bread winner of our family. She works as a wage worker and earns Rs. 100 daily. As I suffer from fatigue and tiredness, I cannot do manual work for a long time. Now, I can operate the flour mill and have spare time to even rest. I am in a position to partially finance myself for the medical treatment only because of this flour mill. I would like to thank the women who are a part of the Samyukt Mahila Samiti of our village to have extended a helping hand in the time of utmost need”.

**MAJOR EVENTS**

**VISIT BY MGNREGA COMMITTEE**

The block level MGNREGA committee visited Ibrahimpur, Bhokardan to see the Compartment bunding work done under the project.

**M AJUR MELAWA**

Mr. Narayan Tilakchand Kuche, Member of the Legislative Assembly (MLA) graced the occasion of Majur Melawa held at Lonar Bhaygaon to understand the difficulties faced by the villagers employed under the MGNREGA scheme.

**WOMEN'S MELAWA AT PAGIRWADI**

On the occasion of women’s day, 2,212 women participated in the women’s gathering in March 2016.

**ZERO BUDGET NATURAL FARMING TRAINING IN GUJARAT**

51 participants from Bhokardan, Jafrrabad and Ambad participated in Farmers training at Kalpavruksh farm, Dehari, Valsad district, Gujarat in April 2016.