INDIA WATER PARTNERSHIP

AND

IWWA MUMBAI CENTRE

MUMBAI CENTRE

Report of the activity - 2015

UNDERTAKING CAPACITY BUILDING OF ENGINEERING STUDENTS AND MASONS IN CONSTRUCTION OF LOW COST WATER STORAGE STRUCTURES

ACKNOWLEDGMENT

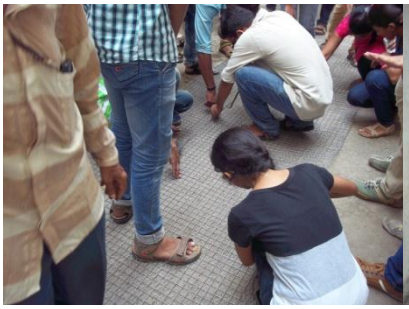
IWWA Mumbai Centre gratefully acknowledges the financial support from IWP for undertaking capacity building of engineering students and masons in construction of low cost water storage structures. We are grateful to the team of Jalvardhini Pratishtan Mumbai for their support in conducting practical sessions at various locations. We are also grateful to SGGS Institute of Engineering and Technology, Nanded for their support by making available services of their faculties for conducting lectures to the participants. We also mention here the active participation of students of various colleges.

Executive summary

IWWA Mumbai Centre recognized the need of rain water harvesting and initiated to spread the knowledge of rain water harvesting and importance of rain water harvesting long back and accordingly conducted 1st National Seminar on Rain Water Harvesting Systems--Planning, Design, Construction and Maintenance Jointly with All India Institute of Local self Govt. 0n 28th Feb and 1st March 2003. There after Mumbai centre has organized four training courses on rain water harvesting. Recently Mumbai center organized two days National Seminar on "Water Conservation & Rain Water Harvesting" hosted by IIT Bombay at VMCC, IIT, Powai, Mumbai on 14th-15th March 2015.

India Water Partnership, Global Water Partnership (South Asia) approached IWWA Mumbai centre to undertake activities for capacity building of engineering students and masons in construction of low cost water storage structures. Accordingly IWWA Mumbai Centre took following activities in the year 2015.

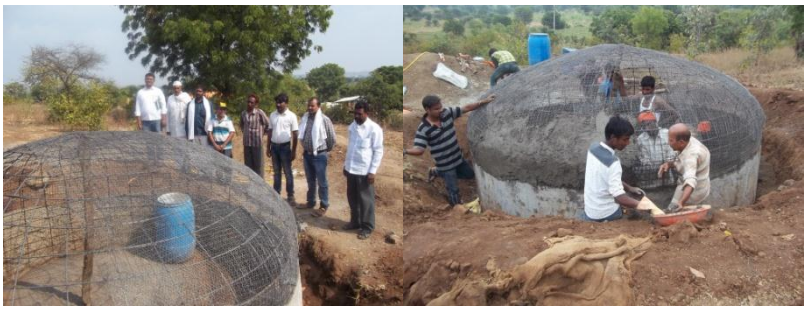
1) Er. Ulhas Paranjpe Hon. Jt. Secretary of Mumbai Centre and team from Jalvadhini Pratishtan, Mumbai have arranged Training Program on Water conservation at Saraswati College of Engineering, Kharghar, Navi Mumbai.on 9th-10th Oct. 2015. Two tank of 700 Liters capacity each were constructed in the collage premises. These tanks will be used by college for curing of Cubes.



2) Er. Ulhas Paranjpe Hon. Jt. Secretary and his team gave training to Mason at Pokharbhosi, Taluka Loha, Dist. Nanded for constructing . two Ferro cement Water Storage Tank having capacity of 1,400 and 20,000 Liters. Tanks are completed in Nov 2015.While constructing or creating storage

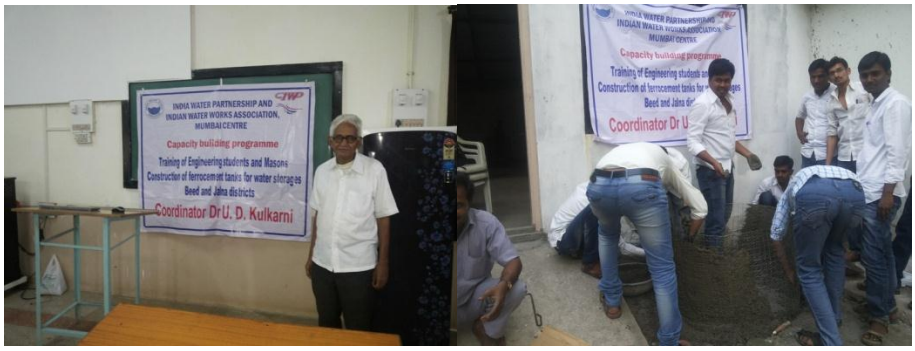
facility at Goshala at Pokharbhosi, Taluka Loha, Dist Nanded, IWWA Mumbai Centre gave training to few Engg. students and Mason about how to construct Ferro cement Tank and Vermi Compost Tank. Shri U.M.Paranjpe Hon. Jt. Secretary, Er. Rushikesh Davalbhakta, IWWA Member and Er. Satish Patankar. and members from Jalvardhini Pratistan helped in training of Mason and Engineering Students from Nanded. Work continued for about 10 days. In those 10 day Two water storage Tanks and one Varmi compost Ferro cement Tank was constructed

Ferro cement Tank of about 20,00 Liters Capacity, having Cylindrical shape with Dome shaped cover,1400 Liters capacity Ferro cement Tank and 10 feet X 3 feet X 3 feet Ferro cement Vermi compost Tanks were constructed while training Mason and Engineering Students. During construction many Mason took part in activity and learned Ferro cement Technology. They understood how to construct a Storage Tank with Ferro cement Technology. As such training was given to Mason, Farmer, Engg. Student, Teachers and Engineers at site.



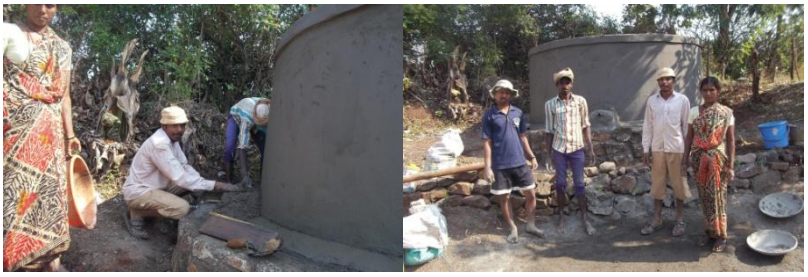
3) Training Program on Water conservation was organized at College of Engineering Ambejogai, Dist Beed in Marathawada on 23rd Nov. 2015.About 100 student were present for practical. Masons were trained to construct Ferro cement Water Storage Tank. Two tank of 700 Liters capacity each were constructed in the collage premises. These tank will be used by college for curing of Cubes. Mr Ulhas Paranjpe, Joint Secretary of Mumbai Centre in his address highlighted the significance of rain water harvesting and developing water storage structures to achieve the goal of water secured world. He explained the various techniques and materials useful for

construction of water storage tanks. Further the participants were given opportunity of constructing of 2ferro cement tanks of 700 Liters Capacity each Participants have acquired the skill of constructing the cage using weld mesh and chicken mesh and applied cement mortar on both sides. Prof Laxman Ambi, of Department of Civil Engineering and Mr Atish Harbhare of SGGS Institute of Engineering and Technology, Nanded have helped the participants to acquire the knowledge of the technology. Appreciating the ease of construction, cost effectiveness and wide range application of the technique, the participants have shown enthusiasm to take the ferro cement technology for water storage structures in rural areas of Marathwada as drought relief. In view of prevailing drought situation in this region. The students and staff of the College of Engineering have decided to spread the message of water secured world to the masses. Local masons were trained in this techniques who have shown willingness to take up works in the region. Prof Laxman Ambi has volunteered for the extension of the services in the rural area of Beed district through the trained manpower.



4) Shri Arjun Narayan Agivale, Shri Parshuram Tatu Agivle, Shir Ram Kashinath Agivale are Tribal Farmers from Village Mograj, requested to help them in constructing water storage facility. Er. Ulhas Paranjpe Hon. Jt. Secretary and his team from Jalvadhini Trust, Mumbai gave training to Mason and farmers at Mogaraj, Taluka Karjat Dist Raigad for constructing . two Ferro cement Water Storage Tank having capacity of 6000 Liters. Tanks are completed in Dec. 2015.Tank cost born by Jalvardhini Trust. Six Masons were trained in construction of low cost water storage tanks with Ferro cement technology. Now they have realized that no special expertise is required for using Ferro

cement technology for constructing water storage tanks. This is a good example of what can happen if Farmer and local Mason starts learning and storing water for Farming.



5) Er. Ulhas Paranjpe Hon. Jt. Secretary of Mumbai Centre and team from Jalvadhini Trust, Mumbai have arranged Training Program on Water conservation at Rajendra Mane Polytechnic at Ambav (Devrukh) Tal. Sangameshwar Dist. Ratnagiri. on 22nd Dec 2015. Final year Civil Engg..65 Students ,Staff and 4 delegates from Nisarga Mitra Mandal, Chiplun were also participated. Masons were trained to construct Ferro cement Water Storage Tank. Two tank of 700 Liters capacity each were constructed in the collage premises. These tank will be used by college for curing of Cubes.

Program includes Live demo for Low Cost Ferro cement & Natural Fiber cement Tank. Then Lecture on Design of RWH system and Water conservation. Another lecture on Different options to store Rain Water or Water at village level was given to the participants. Lectures were followed by question and Answer from students and staff. After lunch break Training of Students and other participants including non teaching staff was conducted by constructing 2 tanks of 4 feet in dia and 2 feet in height.

Conclusion

To achieve the objective of IWWA to spread awareness among the rural population regarding water conservation through rain water harvesting , IWWA Mumbai Centre is constantly putting their efforts. These efforts are now supported by IWP,GWP(South Asia). The outcome of above activities is so promising that the poorest population of villages are now aware of low cost technology of Ferro cement. The ease of construction of water storage tanks. No need of expertise. The people of Pokharbhosi, Taluka Loha, Dist.Nanded and Farmers of Mogaraj, Taluka Karjat Dist Raigad, are now aware of water conservation and they can now built at their own low cost water storage tanks with Ferro cement technology.

The activities at collage level are also proved to be very successful. Students active participation shows how enthusiastic they are in learning low cost technology. This will certainly help in socio-economic development.