Transforming Lives

Annual Report

2016-2017

Dilasa Janvikas Pratishthan

Transforming Lives

Annual Report
2016-2017

Dilasa Janvikas Pratishthan
Aurangabad

Contents

1

Brief about Organization

Dilasa Janvikas Pratishthan is an organization dedicated for the rural development and makes the seal of its presence in watershed development and women empowerment. Presently, it is working in 5558 villages of Maharashtra state. The organization has established its offices in Nasik, Pune, Sindhudurg apart from its main office at Aurangabad.

The Awards of Dilasa

- ***Bhoomijal Samvardhan Award*** for adopting Innovative Practices of Ground Water Augmentation
- ***John D. Rock Feller Scholarship*** is the first time when scholarship is awarded to the NGO.
- ***Vanashree Award*** for remarkable plantation work with developed simple activity of seed sowing.
- ***Jalsandharan Award*** for its successful work in watershed development.
- ***National Award*** for Innovations in watershed development.
- ***Mahatma Phule Jal-Bhumi Abhiyan Puraskar*** for remarkable work in soil and water conservation.
- ***Sinchan Mitra Puraskar*** for completion of 25000ha. soil & water conservation work.
- ***IWWA Award*** for remarkable contribution in the field of water supply.
- ***Water Digest Award*** for outstanding contribution in the field of water.
- Membership for ***Maharashtra Haritsena*** from Forest Department, Maharashtra
- VO/NGO Registration on ***NGO Darpan*** portal from NITI Aayog Government of India.

Lead role of the organization

- **Resource Support Organization** in Indo-German Watershed Development Programme (IGWDP)
- **Resource Support Organization (RSO)** in NABARD supported Integrated Watershed Development Programme (NHWDP)
- **Resource Support Organization (RSO)** in Watershed Development Fund (WDF)
- **State Resource Organization (SRO)** in Livelihood, FPO, Skill Development, etc. for IWMP programme.
- **Resource Institute (RI)** for Small Farmers Agriculture Consortium (SFAC)
- **Producer Organization Promoting Institute** (POPI) for NABARD supported FPOs.
- **Service Provider** for Farmer Common Service Center (FCSC) FPOs for Maharashtra Agricultural Competitiveness Programme (MACP)
- **State Level Accredited Monitoring Organization** for Monitoring, Evaluation, Learning and Documentation (MELD) of IWMP Programme in Nasik Agriculture Division.
- **Monitoring Agency for Jalyukta Shivar** of Maharashtra State.
- **Monitoring Agency for Hariyali,** IWDP, DPAP watersheds of Maharashtra state.
- **Empanelled Monitoring Organization of YASHADA** for various government schemes.

Feather in our cap

- Dilasa as a strong implementing organization treated almost 5 lakh hectares area of land, which itself is a record.
- Constructed record number of Cement Nalla Bunds (CNB) under CSR and Government schemes in Marathwada region.
- Implemented first aquifer management pilot project in the country.
- Established more than 125 FPOs in Marathwada & Western Maharashtra and forming 52 more FPOs in Nasik Agriculture Division.

- Established unique Chamber of Farmer Producer Organization for the handholding support of Farmer Producer Organization (FPO).

Lead role of the organization

- Implemented more than **320 village water supply schemes** in Jalswarajya Project of World Bank and Aaple Pani Project of Kfw.
- **Installed drip system** on 5000 hectares of land in Aurangabad district by bridging the gap between the banks and the farmers.
- Only organization which is actively working in **commodity marketing** for the farmers by providing essential food grains to the reputed institutions like ESCON and initiated first shoplet of FPO Baliraja in the APMC Market of Lasur station, which is considered as the major market of food grains.
- Implementing unique project of **System of Rice Intensification (SRI)** in 8 blocks of Sindhudurg district. In addition, organization is implementing biodiversity project in Aurangabad district.
- Implementing **Better Cotton Initiative (BCI) Project** for Ten Thousand farmers, which is a model of intensive agriculture extension for increasing per acre yield, sensitizing about pesticides and fertilizers.
- Implemented first model project of **Rain Water Harvesting** in the state with the help of UNICEF and presently propagating it in a big way.
- Introduced at least dozen new **innovative models of drainage line of the watershed** project. These innovations revived the award from the Central Agriculture Ministry.

Credentials

- The organization received 96% marks in watershed development and sustainable livelihood for the empanelment of the State Level Monitoring Agency.
- Institutional study conducted by NABARD, Pune office –Got 92 % marks
- Life Member of Global Compact Network of India (GCNI) and in Implementing Agency (IA) Hub of Ministry of Corporate Affairs (MoCA)
- National level rating by Department of Land Resources (DoLR) – One of the 8 agencies in Maharashtra – MELD for Integrated Watershed Management Programme (IWMP)
- Project Steering Committee member in Tribal Development Fund projects of NABARD
- CAF India : Certificate of validation-241 for 2016 to 2016 by CAF India.
- NGO Portal System (Darpan) : Registered under NGO portal by NITI Ayog.
- GuideStarIndia Gold Certificate: Certificate of Transparency by GuideStarIndia.
- Life member under Hydrological information network HDUG.
- Life member under Indian Water Works Association (IWWA).
- Life member under Asia Pacific Water Forum (APWF).
- LEISA India : Membership of organization for Agriculture Advanced Techniques- Member ID 118041.
- Bombay Natural History Society (BNHS) : Membership of organization for nature conservation - Member ID 70050.

Infrastructure

- Well equipped building at Vedant Nagar. Spacious area of 6000 sqft with cubicle to the staff.
- Training centre and proposed working women's hostel at prime place of Aurangabad city i.e. Samadhan Colony behind District Court near to Adalat Road, Aurangabad.
- Agricultural land for the proposed agri-processing cluster on WALMI Bajaj Road in Valadgaon premises.
- Laptops - 20 nos., Tab - 6 nos., LCD projectors -2 nos., Air Conditioners - 10 nos., Agro equipments and tools, CCT Cameras, Computer - 28 nos., Laser Printers - 10 nos., Color Laser Printers - 2 nos., Xerox Machine - 2 nos., Digital Cameras - 5 nos., 1 DG set -1 no. UPS System - 1 no., Computer Backup System- 100., Video Conferencing Centre.
- Site equipment - Abney & Dumpy level, Survey Equipments.

- Vehicle arrangements - Vehicle Trackers, Motorcycles - 12 nos., Jeeps - 3 nos., Ambassador - 1 No., TATA Zest - 1 no., Mahindra Scorpio, Mahindra TUV 300, Tractors -2 nos., water tankers - 1 no., Loading Rickshaw -2, Mahindra Minibus, Refer Van, Ayesher Tempo - 1 no., Dehydration unit - 1 no., Sound System - 3 nos., Refrigerator - 1 nos.,
- Two Telephone facilities, Fax, Broadband Fiber Optic Cable internet connection.

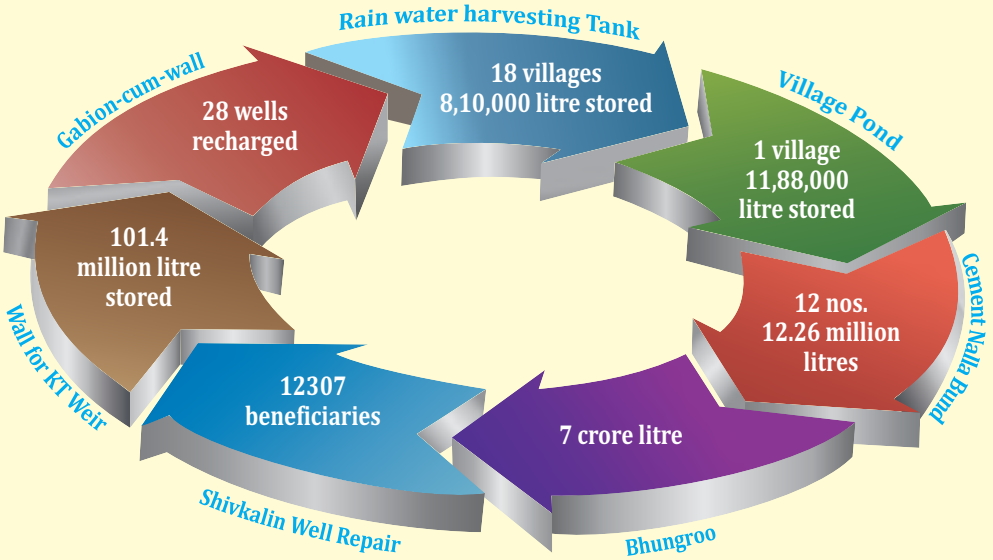
Implemented projects

- Monitoring, Evaluation, Learning & Documentation (MELD)
- CSR Project - ACC Cement
- Girsavali Watershed - Coca Cola India Foundation
- World Bank supported Maharashtra Agriculture Competitiveness Programme (MACP)
- Better Cotton Initiative (BCI) fast track project
- Farmer Producer Organization (FPO) promotion under SFAC
- NABARD supported Producer Organization Promoting Institution (POPI)
- State Resource Organization (SRO) for Integrated Watershed Management Programme (IWMP) - YASHADA, Pune
- Watershed Programme CSR - Multi Commodity Exchange (MCX)
- Financial Inclusion Improves Sanitation and Health (FINISH) Programme
- Backward Region Grant Fund (BRGF) - Capacity Building & Training
- Study on Situation Assessment & mitigating measures regarding farmers' suicides in Marathwada region - NABARD
- Project Implementing Agency (PIA) - Integrated Watershed Management Programme (IWMP)
- Marathwada Drought Relief Project
- Rapid Assessment of Jalyukta Shivar - Monitoring
- NABARD supported WADI (Patur & Igatpuri)
- Watershed Development Fund (WDF) - Aliyabad, Jalkotwadi, Manmodi watersheds
- Mahindra CSR - Shivjal Kranti
- Edelgive CSR
- Centre for Sustainable Livelihood

2

Shivjal Kranti : CSR of Mahindra & Mahindra

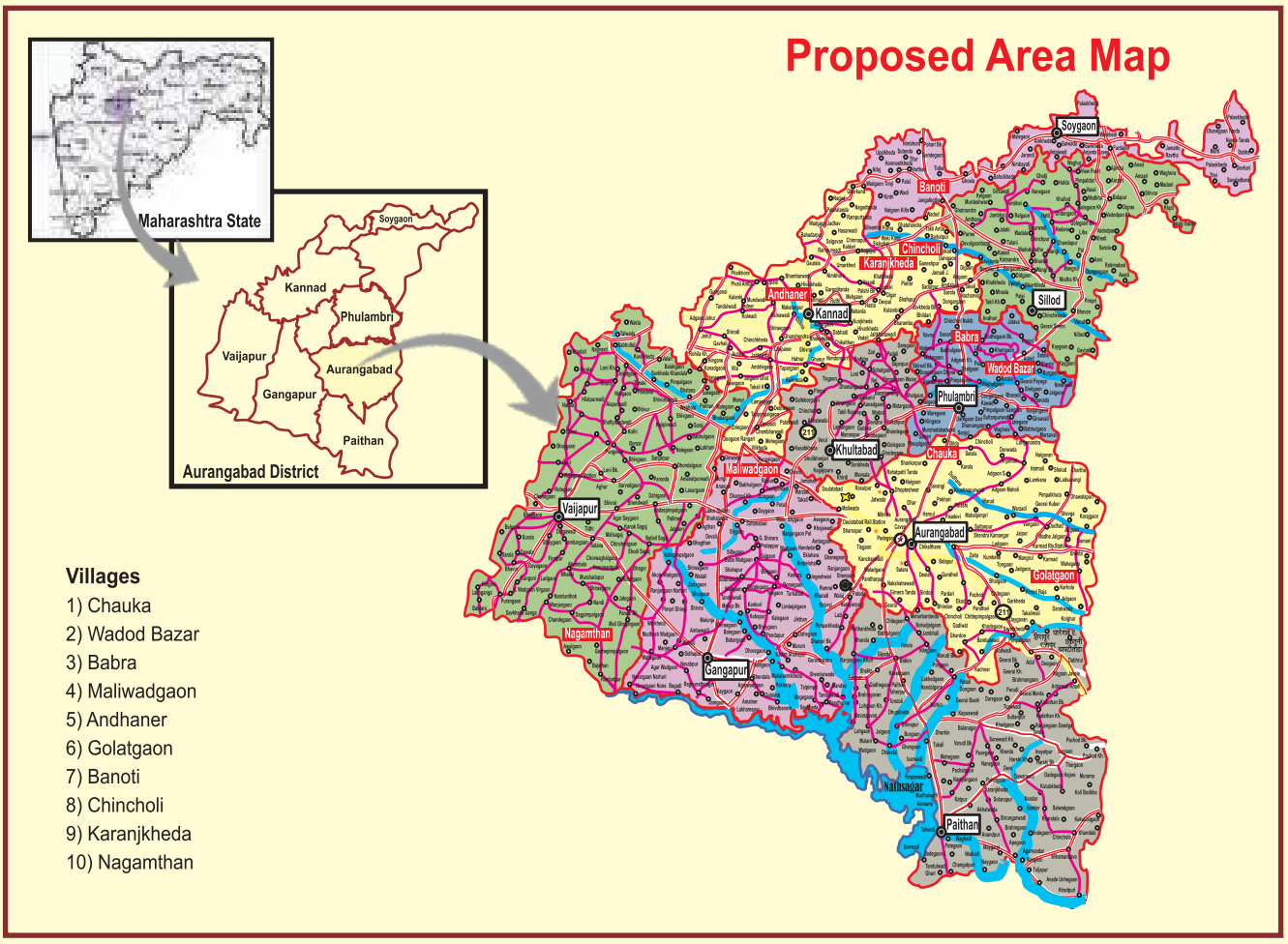
Water forms an integral part of the lives of the people. The scarcity and unavailability of water will push people into a vortex of poverty by causing damage to agricultural crops, loss of livelihoods etc. In this context, the battle fought by the villagers of Aurangabad, against the consecutive droughts over the years can't be left unseen. The district has been facing severe droughts since 2011 to 2015. Along with the erratic nature of monsoon caused by climate change has aggravated their condition. The Mahindra and Mahindra group joined hands with the Dilasa Janvikas Pratishthan with the aim of finding a sustainable solution to the wrath of the drought faced by the villagers. The plan of action involved immediate drought proofing for 50 villages, which could support 67511 beneficiaries.



Cement Nalla Bund

Conservation of water can be achieved through construction of new structures and also through the maintenance and repair of existing structures. A small intervention making big impact was the guiding principle for this effort. The user friendliness of the structures were also taken into consideration. Apart from the construction of Rain water harvesting tanks, Cement Nalla bunds, Village ponds, Bhungroo and Gabion cum wall repair and maintenance activities were undertaken for shivkalin wells and K T Weir structures.These works have helped the villagers in multiple ways. The water table improved in the region, reducing the water fetching distances. The villagers welcomed the rainwater harvesting tanks as it solved the water scarcity problems in the lean period. The repair of the Shivkalin wells transformed the dead wells into useful assets.

Dilasa played a major role in this transformation as the implementing agency. The key objectives of the project was to carry out immediate drought proofing measures thereby increasing the ground water recharge which would in turn lead to the up lifting of the rural people. Community interactions across villages were conducted to understand their requirements and opinions. Identification of existing wells with GIS data and thematic map was done. The efficient work of Dilasa employees ensured that the technical survey and estimate preparation were completed without any delay.



The mere construction of storage structures will not ensure the conservation of water, for this awareness creation and training is required. Dilasa team conducted training on drought proofing and water conservation measures in various villages. The school children were given classes on climate change, water purification measures and water conservation.

The support of Mahindra and Mahindra made the first phase of Shivjal Kranti a huge success. The villagers were thrilled as water was available for their daily activities. At the same time, there is still a vast potential for rainwater harvesting in the region. In order to tap this, a technical feasibility study was conducted in ten villages in the region. The core team and the field team interacted with people from 10 villages to do the need assessment. All the villages were primarily dependant on agriculture though they were affected by drought in four consecutive years. On an average drinking water was available only for 7-8 months. In some villages like Chawka, Nagmathan women have to walk up to three kilometers from home to fetch water, which is even muddy. The lack of water purification system has taken toll on the health of the villagers. Along with this the cattle rearing is also affected due to water scarcity.

Climate change always affects the people in the low-income strata. As they are already vulnerable economically, the erratic rains and heat waves contribute towards increasing their vulnerability.

The target of any mitigation and adaptation program should be the people falling in the low-income category, which in the context of India are always the small and marginal farmers. The beneficiaries of the second phase are around 4435 villagers. The phase II of the Shivjal Kranti aimed at creating a total water potential of around 449.01 tcm The Dilasa team, for all the 10 villages prepared a complete activity chart. The major works envisaged included desilting of CNBs, plantation of trees along the CNBs, purification of water using bio-sanitizer technology and construction of rainwater harvesting structures. Eighteen urgent measures

Bhungroo Technology

were planned in which seven were the construction of Cement Nalla Bunds. The others were the repair of two K T Weirs and development of two bamboo plantations. The water purification using bio sanitizer has been planned for Banoti village while for the Babra village which has not been covered in the phase one is set to have a rain water harvesting tank and repair and desiltation of existing CNB.

What are these interventions?

Cement Nalla Bund

Constructed across the canal or the river which reduces the velocity of the flow and increases the percolation to the soil. It is a permanent masonry structure and it helps in the recharge of wells and tube wells nearby it.

Bamboo Plantation

Bamboo Plantation will be done along the banks of the Nalla. The fast growing bamboos on the one hand will reduce the evaporative loss of water from the nalla and provides stabilization to the banks. The villagers will be maintaining the plantation and landless families can utilize bamboo plants after full growth.

Bio-Sanitizer Technology

Bio-Sanitizer technology uses tablets which are specially formulated to provide safe, efficient and reliable disinfection of water or wastewater flows. The granules operate from the bottom and keep on producing oxygen. This drives the natural reactions that convert the salty/brackish into usable form. This water also resists scaling, corrosion and growth of pathogens/pests. It becomes a resource for organic agriculture and eco-sanitation. The mechanism is similar to that used by the coconut tree in converting saline/brackish water into sweet coconut water

Rain Water Storage Tank

A permanent structure made of ferro cement. The capacity of the tank is 10,000Litres. The pipes connected to the roof will harvest the rain falling on the rooftop during monsoons and in the lean season it acts as a storage structure. The life of tanks is around 75 years.

KT Weir Repair

Popularly known as Bridge cum barrage, it is constructed to tap river waters in small quantities in multiple spaces. Corroded gates and bushes will lead to malfunctioning and no storage of water.

Status of the work

The meticulous planning and working in the past four months have yielded considerable results. All the activities laid out are proceeding as per plan. And in the first quarter, one third of the works are completed. If we consider village wise implementation, out of ten, the proposed works in three villages have been finished and works are going on in other villages. Out of the eight CNB, four have already been finished.

A hundred percent completion was reached in the case of K T Weir repair. Construction of two rainwater harvesting structures one each in Wadod Bazaar, Babra village were outlined in phase two, and the construction in Babra is already over. Till now a total water storge capacity of 303.63 tcm has been created. In the current pace, Dilasa will be able to finish all the existing works in in the stipulated time frame.

Cement Nalla Bund

The way forward....

For the upcoming 8 months, Dilasa has already prepared a full-fledged plan for the conservation of water. This includes provision of bio sanitizer system for water purification in Banoti, establishment of bamboo plantations in Aurangabad and Gangapur and construction of Cement Nalla Bunds in Chakua,Malivadgaon, Chincholi and Banoti. Special attention will be provided to Wadod Bazzar where rain water storage tank and animal water tank will be constructed. All the construction activities will be finished within quarter 3 and a report will be submitted on the same. In the fourth quarter, the villagers will be given training on the maintenance of the structures and Dilasa will undertake elabo-rate assessments of the impacts of the interventions.

We here at Dilasa believe that both pre-implementation and post implementation phase are as important as the implementation phase. In this regard, an impact assessment report to Mahindra and Mahindra with selected parameters like, increase in the water table, distance and time involved in fetching water etc. The improvement in these indicators will be able to quantitatively assess the changes created due to the work by Mahindra and Mahindra and Dilasa Janvikas Pratishthan.

With the completion of phase II of the program, Dilasa and Mahindra & Mahindra hope to provide a respite to the water scarcity in the region. This will help in improving the lives of farmers dependent on rain fed agriculture, women, marginalized and landless people. The entire drought proofing activity will help the people to cope with impact of climate change by increasing their preparedness.

3

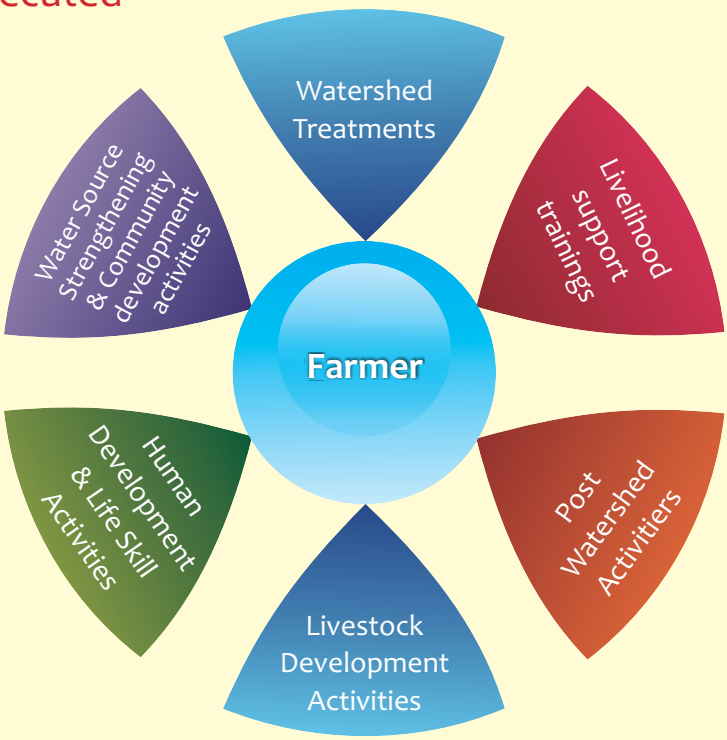
Holistic Watershed Development Programme: CSR of DHFL

Introduction

Over 80 percent of the population in rural areas is engaged in agriculture. However due to continuous drought over the last four years especially in Marathwada region, agricultural productivity has been low. Improving agricultural productivity is necessary to meet the needs of people. Sustainable increase in production can be achieved by making sustainable use of natural resources. One of the major causes of low productivity is lack of irrigation facilities. Lack of water is not allowing villagers to change the cropping pattern and in turn increasing the migration rate and also drudgery on women. There are also many indirect effects associated with it. In order to address the above problems of rural people especially in the drought prone areas of Phulambri, DHFL joined hands with Dilasa Janvikas Pratishthan. Programme focused on developing whole village in every aspect over the period of three years covering 5 villages and benefitting 7060 villagers.

Dilasa's vision and mission to empower villages saw the launch of the Holistic Watershed Development Programme at Babhulgaon on May 1, 2016. Babhulgaon is a representative village in the Phulambri block of Aurangabad district, which comprises 5 sanctioned villages. The divisional commissioner – Dr. Umakant Dangat; Vice President and Executive Assistant, CMD's Secretariat of DHFL – Mr. S. Govindan; Chief Operating officer of Samhita Social Ventures – Mr. Purushottam Awasthi; Mr. Solomon J Manohar of Samhita Social Ventures; Ms. Siddhi Lad of DHFL; Dr. Anagha Patil, President of Dilasa Janvikas Pratishthan; Mr. Sanjeev Unhale, Secretary of Dilasa Janvikas Pratishthan; Ms. Vaishalee Khadilkar, Vice President of Dilasa Janvikas Pratishthan and other staff of Dilasa Janvikas Pratishthan were present. Over the year 2016-17, Dilasa have implemented several activities like soil and water conservation structures, post watershed activities, livestock, human and community development activities.

Interventions Executed



Watershed Treatment Activities

Ridge to Valley approach has been followed for implementing soil and water conservation measures in the selected watershed areas. This restores the ecological balance by harnessing, conserving and developing degraded natural resources such as soil, vegetative cover and water. The outcomes are prevention of soil run-off, regeneration of natural vegetation, rainwater harvesting and recharging of the ground water table.

Ridgeline Treatments – To reduce the soil erosion, retain top soil and to conserve water these activities have been carried out.

Area Treatments – To increase the productivity focusing on individual farmer, these activities have been carried out.

Drainage line Treatments – To increase the water storage potential, these activities have been carried out.

Post Watershed Activities

Micro irrigation today is a major concern regarding the water saving and proper utilization of other inputs popularly known as LIESA (Low external input and sustainable agriculture) technique. LIESA is the technique that is followed for the judicious use of inputs in agriculture with the major

help of drip irrigation. It is vital to interact with all farmers after the implementation of the watershed activities to spread awareness of the benefits that would be reaped by the beneficiaries. Demonstrations & awareness on drip, sprinkler and mulching has been covered under this programme in all the five villages.

Livestock Development Activities

Rural families are fundamentally dependent on land, water and livestock for earning their livelihoods. Livestocks often play an important role especially in rainfed regions where crop production is uncertain. Among the livestock, cattle, buffaloes and goat play a significant role because of their contribution to plant and human nutrition. Dairy and goatery time and again remain the only hope for drought hit farmers and assure them of better sustainable livelihood. Veterinary care needs to be taken on priority as ill-health directly affects the economy especially in regions lacking basic veterinary facilities as well as knowledge. Thereby

emphasis has been put on livestock for enhancement of rural livelihoods and planned to conduct village level animal health camps to ensure veterinary services at the doorstep of farmers.

Inadequate supply of quality feed and fodder is considered as the primary cause of lower milk production. Huge cost is incurred and there is a fall in fodder availability in drought hit areas. Accordingly fodder management and sustainable fodder demonstrations has been included in the program. During 2016-17, Dilasa have organized animal health camps, fodder demonstrations and installed Travis in all 5 villages.

Human Development & Life Skill Activities

Protecting our nature's eco-system from further damage is crucial. Fresh, clean and potable water is a limited resource. Although most of our planet earth is covered with water, most of the water is seawater, which is saline and not fit for consumption by humans and other species living on the land, unless desalinated. Further, desalination is an expensive process especially for developing countries like India. In addition, natural calamities like frequent droughts limit the access to clean and potable water. Considering these unavoidable circumstances, everyone has the moral responsibility to conserve water for human survival during the tough times of drought. Keeping these facts in mind, necessary measures should be taken so as to conserve the most valuable and essential resource i.e. water.

One of the measures towards achieving this goal is construction of watershed structures to store water. However, this measure cannot take care of the water conservation by itself. Hence, it is necessary to create awareness about water conservation in everyone. Educating and training the younger generation on the importance of water conservation can achieve this. Taking a step towards this end and as a part of Holistic Watershed Development Programme in all the five villages, Dilasa have organized school rally as well as school camp on water conservation.

Biodiversity is directly connected to human life. On the event of *World biodiversity day – May 22, 2016* Dilasa organized a **training programme for farmers on biodiversity** where speakers from various departments shared their knowledge.

Adolescence is a transitional stage of physical and psychological development that generally occurs during teenage period. It is very necessary to educate the women on common issues regarding sanitation & hygiene. Attention is required towards girls during this stage.

In order to empower the adolescent girls and young women, Dilasa has invited Dr. Anagha Patil, President of Dilasa, Mrs. Vandana Gole & Mrs. Pradnya Deshpande. *Training of adolescent girls on sanitation & hygiene* has been conducted in all the five villages.

Most developing countries are now challenged with the problem of blinding cataract besides a huge backlog. India has perhaps the largest blind and potentially blind population in the world. Although cataract cases can be cured by just a simple surgery, due to lack of awareness most of the people are ignoring.

Eyes play a vital role in day-to-day activities. Health consequences of bad vision might lead to adverse impacts.

In the rural areas where health care facilities are primitive, blindness is more marked than in urban areas. Because of their unawareness and poverty they continue to remain needlessly blind. Therefore eye check-up camps play a major step in this combat against needless blindness. These camps can bridge the gap between the rural masses and healthcare facilities by reaching out and restoring their vision economically. Under this program five eye checkup camps organized in collaboration with Ganapati Netralay, which is one of the renowned hospitals in Marathwada and people have so much faith upon their diagnostic capacities.

Water Source Strengthening

KT (Kolhapur-Type) weir structures, popularly known as bridge cum barrage are old constructions used to rejuvenate the rivers. Under this programme, repair of KT weir which developed a leak took place. This structure will benefit total land in the village and also helps in recharging the drinking water supply well. In order to be sustainable, 1m permanent wall has been constructed. Upon completion of work during the year 2016, drinking water supply well has become live because of the good monsoon and KT weir repair works at Daregaon dari.

Rain Water Harvesting Tanks are permanent water storage structure in the village for the community needs. This is ferro cement tank of 10,000 liter capacity. The tanks are fitted with PVC pipe for roof top water collection with filter arrangement. This structure is mostly used during village festivals to store more amount of water. This has alife of more than 75 years and is cost effective compared to conventional metal or plastic tanks.

Achievement at a glance

ACTIVITIES	ACHIEVEMENTS
CCT	183.09 ha.
WAT	5158 RM
GP	348 no.
EGP	76 no.
Plantation	35 ha.
Farm Bunding	626.6 ha.
Dry Land Horticulture	16.2 ha.
Agro Horticulture	3 ha.
Desiltation of existing percolation tanks	2 no.
Loose Boulder Structure	107 no.
Earthen Nalla Bund	4 no.
Cement Nalla Bund	2 no.
Demonstration of Drip, Sprinkler	24.8 ha.
Approach Road Construction	5.75 km
Installation of Travis	5 no.
Animal Health Camp	5 no.
Azolla, Dashradh & BNH Demonstrations	7 no.
Training of farmers on biodiversity and registers maintenance	5 no.
Training of School Children, School Rally for Water Conservation	5 no.
Training of Adolescent Girls on Sanitation & Hygiene	5 no.
KT Weir	1 no.
Construction of Roof Top Rain Water Harvesting Tank in village	1 no.
Health Camp for Men, Women and Children	5 no.

4

Rejuvenation of Kambli River ACC Cement Ltd - CSR Initiative

Corporate Social Responsibility initiatives supplement the Government sector's works in the drought prone areas of Maharashtra. ACC Cements is a company which has much experience in activities related to watershed management and soil and water conservation. As the Maharashtra Government charted out immediate drought proofing measures for various tehsils, ACC stepped up and took the charge of making the four villages in the Ashthi block of Beed district drought resilient. The technical expertise and ground level experience of Dilasa Janvikas Pratishthan made it the first choice of ACC Cements as its implementing partner.Beed district is subjected to drought for the past four years and it has hampered the agricultural activity in the entire region. The villages receive

rainfall from South-West monsoon which generally starts from June and prevails up to September. Normal rainfall of the area is 590 mm. No. of rainy days are around 45 as per the data from GSDA. The productivity of rain fed agriculture predominantly depends on the intensity and duration of rain, the erratic rains in the changing climate scenario has worsened the situation. Though the district has unconfined aquifers, the lack of rains over the years have resulted in poor recharge of aquifers. The water table ranges from GL to 12.80 m bgl during winter. Most of the wells are dry in summer except 10 wells which are having stored or negligible quantity of water which cannot support irrigation. This has led to high migration rate in the villages.

The main goal of the project was improve the rainwater percolation into the soil and also to augment the ground water recharge through construction of rainwater harvesting structures. These objectives can only be fulfilled if we have full participation of the community. Awareness programs and participatory appraisal of the water sources were conducted in the villages of Hiwra, Pimparkhed, Bhojewadi and Welturi. IEC materials were distributed during these activities and through these sessions we were able to finalize the type of interventions required. It was identified that the harvesting of rainwater will not only help in maximizing its usage, but also aids reduction in usage of ground water.

As per the hydro geological condition, the water availability is better in the region till January as the Kambli River flows till that period. K T Weir constructed to hold the flow of Kambli river was in a dilapidated condition which basically rendered it useless. Foremost priority was given to the repair of K T Weir and decision was made to develop the plan for construction of structures keeping in mind the ultimate goal of rejuvenating the river. The structures constructed were Rainwater harvesting tanks, cement nalla bunds.

Ferrosan rainwater harvesting structures were constructed in all he villages. Trained and experienced masons were employed for the construction. The villagers welcomed the rainwater harvesting tank whole heartedly as it helped not only conserving rainwater , but also stored water in the lean period. This solved the issue of drinking water to a great extent. The outflow from the tank was directed for recharging the ground water. In case of the hilly regions were the water table was really low, the construction of rooftop rainwater harvesting structures proved to be a boon.

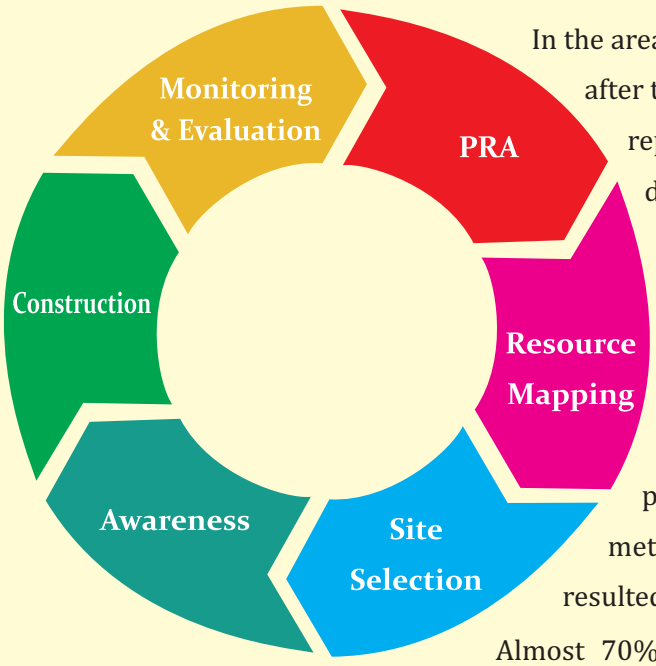
Cement Nala Bunds helped in retaining the moisture and improving the water percolation during rainy season. The basic idea was to make the running water to reduce its pace and increase the underground seepage. It has benefitted the wells and bore wells in 0.50 km on either side.

Even during the project phase, Hiwra village received rainfall after the construction of two CNBs and the results were noteworthy.

Sr. No.	Type of intervention	Name of Villages	No. of structures	Storage in TCM	No. of fillings
1	Cement Nala Bund	Hivara	3	10.19	3
		Pimparkhed	2	7.47	3
2	Roof Top Rain Water Harvesting Tanks	Pimparkhed	6	0.018	3
		Bhojewadi	2	0.006	3
		Welturi	4	0.012	3
3	Rain Water Harvesting Tanks	Hivara	9	0.027	3
4	Repair of KT Weir	Hivara	1	40	3
	TOTAL		27	57.723	

Total 5 Cement Nala Bunds were constructed during the project period in the villages of Hivara and Pimparkhed. It created a water storage potential of 17.66 TCM. The advantage of CNB is that it's a permanent structure and does not require continuous maintenance. The only maintence work which has to be done is desiltation of the CNB in every 3 years. The silt is also usable in the field.

The repair of K T Weir resulted in the storage of nearly 800 m length back water on its upstream side. The total storage of KT will be 40 TCM which will recharge around 27 wells and 30 bore wells near the banks of Kambli river. The benefit of the construction of wall will not only recharge the wells only in Hivara area but also the benefit will be in Pimparkhed village which nearby Hivara.



In the area where structures were created, changes were visible after the first rains. The villagers of Hiwra and Pimprakhed reported an improvement in the annual family income due to protective irrigation and due to increased livelihood opportunities, as they were able to provide sufficient water and fodder to cattle. At the same time, the construction of rainwater harvesting tanks served dual purpose, one storing the water from monsoonal rains and two, acting as a storage structure during lean period. It also reduced the costs of buying individual metallic containers for water storage. The entire activity resulted in an increase in the recharging of wells.

Almost 70% of the irrigation wells were recharged after the treatment and 90 wells inthe Hivara and Pimparkhed was also seen to have improved water storage. The repair of K T Weir will store nearly 40 tcm water and will enhance more percolation. With the completion of all the 27 watershed structures, more than 1000 families in the villagers are hopeful that they will get respite from water scarcity as they could trap every single drop of rain.

5

Jalsanjeevani Project : CSR of United Breweries Ltd

Background

Gangapur block is situated in Aurangabad district nearby Industrial area. Industries cause huge water pollution with their activities. These pollutants are extremely harmful to humans and environment. This block is also been affected by drought since last three years. All the villages in this block are not having enough water resources to meet their daily needs. Drinking water availability is only for 7-8 months and then continuous tanker for drinking water. In order to generate huge potential of safe water, United Breweries have joined hands with Dilasa Janvikas Pratishthan in the month of March 2016.

Distribution of Water Purifier

The main motive of distribution of the water purifier on behalf of United Breweries and Dilasa Janvikas Pratishthan was to address the waterborne diseases caused as a result of the impure and un-hygienic drinking water available to the villagers from Maharashtra Industrial Development Corporation (MIDC). Due to the close proximity of chemical factories from the farms, the residents are prone to polluted drinking water source which has compelled them to use the water as provided by MIDC. Since MIDC also has other regions in its ambit to cater drinking water to, the quality of water provided to these villages has deteriorated and reduced over a period of time and therefore it is un-filtered. A constant visit to the doctor is yet another implication of the impure drinking water.

Process Involved

- Information was disseminated to the villagers regarding the benefits and advantages of using water purifier
- Live demonstrations were also conducted in which water purifiers were installed and inspection was also done
- Household level documentation was made to ensure avoiding reselling to others
- Household contribution of 200/- was collected to built ownership among them

A Shift to a Healthy Lifestyle *(Pot to Purifier)*

Deepening of Well

Ambelohal village was not getting enough water to sustain the daily routine activities of the villagers. The daily requirement of the village comes to 1,86,520 liter of water but 6 tankers with overall capacity of 72000 liter everyday was received in the village which means a deficit of 1,14,520 liter. The requirement was huge but the well which is used for storing water was not able to hold the same. In the village there was only one well with the depth of 64 ft and therefore there was a necessity to deepen it more for about 21 ft. Thus, to achieve the same, in the month of June 2016, the well deepening activity was taken up.

Impact

- Tanker service was discontinued from the village
- Huge amount of water got stored
- Drudgery on women in fetching water was reduced

Upon the completion of work, the villagers have extended their heartfelt gratitude to the company for selecting their village and also thanked Dilasa for helping United Breweries select their village and the activity of well deepening because of which drinking water problem of the village was resolved.

Desiltation of well

This activity of de-siltation was taken up in Ghanegaon village for making quality water available to the villagers. The well was dug in the situation of drought in 1972 for the income generation and drinking water for the local community. Since 45 years, desiltation work of the well is not executed by any agencies or government.

Process Involved

- Tanker service was discontinued from the village
- Huge amount of water got stored
- Drudgery on women in fetching water was reduced

Impact:

- Reduce the drudgery on women
- Making water available

"Prior to the de-siltation, we received muddy water and water was therefore made available by a tanker at the Gram Panchayat level. But due to the silt collected in the well, the water had no utility to us. Additionally, the water also had a stink associated with it which made it all the more difficult to make use of it. After the de-siltation, the water now available at our disposal for household chores is much cleaner and the foul stink has also reduced. We are very thankful to the team of United Breweries for the same."

- Dhanubai Tukaram Bansode

Cement Nalla Bund

The works of construction of Cement Nalla Bund which were pending from the agriculture department from the last ten years were covered under the CSR mandate of United Breweries. Ten years ago the area had received approval of construction of 7 to 8 CNBs but due to unavailability of funds the same could not be materialized. Thus, this activity is taken up as priority.

This structure will be constructed across nalla to store water in it and recharge the nearby wells. These are maintenance free and require only desiltation once in 3 years. These structures store only required quantity and remaining water flows back into the nalla.

Process Involved:

- Survey of the Nalla was conducted.
- Approval & consent from both the owners of the plot was taken.
- Site clearance with the help of JCB was taken up.
- Foundation work and construction of CNB took place.

Benefits:

- Survey of the Nalla was conducted.
- Adequate drinking water availability and tanker may not be required.
- Drudgery of women for fetching potable water will be reduced.
- Increase in annual income of villagers due to increase in agriculture production because of protective irrigation.
- Reduction in poverty level as animal husbandry will be proving to be allied sustainable livelihood for poor, landless and marginal farmers with increase in fodder availability.
- Nutritional value of the meals may be increased due to availability of food.
- Micro irrigation practices will be practiced.

Water Storage Tank

During interactions with the villagers it was understood that there is a dire scarcity of drinking water which is persisting and a perennial issue which is being faced by them. Discussions were held on the ideal and the possible solutions to reduce the impact of same. This structure is a permanent water storage structure. This is ferro cement tank of 10,000 liter capacity.

Benefits

- It preserves water during rainy season and can be utilized during scarcity
- It provides more convenient distribution of water to individual households
- It requires lowest maintenance cost
- Requirement of metallic tank for storage of water which is an expensive matter but after construction of Ferro cement tanks this has proved to be good storage tanks at the time of big ceremonies in village like marriages and holy festivals
- Increase in local organization capacity and community co-operation in developing and managing their services
- As an alternative where conventional water supply system
- Time saved in fetching water which can be invested elsewhere
- As the tank is closed completely there are no evaporation losses

Perceived Impact at a glance

Water Storage Tank

- Availability of drinking water for several days
- Reduces drudgery & harmful impact on women
- Sufficient drinking water availability to children in anganwadi

Cement Nalla Bund

- Reduce soil erosion
- Water Harvesting
- Increase in water levels
- Increasing in soil productivity - directly influencing livelihood

Water Purifier

- Reduce soil erosion
- Safe drinking water
- Reduced Total Dissolved Solids
- Reduce water borne diseases

Deepening & Desiltation of Wells

- Huge amount of water available
- Pure & Hygiene water for household works
- Less dependency on tankers

Achievements (as on 31/03/2017)

Sr. No.	Activity / Structure	Quantity Planned	Quantity Achieved	% Achievement
1	Water Storage Tank (10,000 ltrs.)	15	15	100
2	Water Pipeline Repairing	1	In progress	
3	Cement Nalla Bund	13	10	76.92
4	Water Purifier	1565	1565	100
5	Deepening of Well	1	1	100
6	Desiltation of Well	1	1	100
	TOTAL	1595	1592	99.81

Water Storage Potential Created

Structure	No of Structure	Water Storage Potential (1 time filling)
Cement Nalla Bund	13	24750
Water Storage Tank (10,000 ltrs)	15	150
Deepening of Well	1	10000
Desiltation of Well	1	10000
Other (pipe repairing & water purifiers)	—	—
TOTAL	30	44900

Media Coverage

जोगेश्वरी ग्रा.पं.चा उपक्रम: रामराई व कमळापूरवासीयांची दूषित पाण्यापासून होणार सुटका; सामाजिक जाणीवेतून पुढाकार

घराघरांत प्युरिफायर !

वाळूज महानगर : वाळूज परिसरातील रामराई व कमळापूरवासीयांची दूषित पाण्यापासून सुटका होणार असून, जोगेश्वरी ग्रामपंचायत व युनायटेड ब्रेव्हरेज कंपनीने या दोन्ही गावांतील नागरिकांना मोफत वॉटर प्युरिफायर यंत्र वाटप करण्याचा निर्णय घेतला आहे. या दोन्ही गावांतील जवळपास ६०० कुटुंबांना यंत्रांचे वाटप करण्यात येणार आहे.

काही कंपन्या अजूनही चोरी-छुपे घातक रसायनयुक्त सांडपाणी या भागातील पाझर तलाव तसेच मोकळ्या भूखंडावर सोडत असल्यामुळे हे पाणी जमिनीत पाझरून जलस्रोत दूषित होत आहेत. जोगेश्वरी, घाणेगाव, रांजणगाव, साजापूर, वडगाव, पंढरपूर, वाळूज, नायगाव, बकवालनगर, नारायणपूर इ. भागांतील जलस्रोत दूषित झाल्यामुळे नागरिकांना आरोग्यासंबंधी तक्रारींना सामोरे जावे लागत आहे. अनेक नागरिकांना कावीळ, गॅस्ट्रो, पोटदुखी इ. आजारांना सतत सामोरे जावे लागते. बहुतांश नागरिकांना जारचे विकत पाणी घेऊन तहान भागवावी लागत असून, आर्थिक परिस्थिती बेताची असलेल्या गरीब नागरिकांना दूषित पाणी पिण्यासाठी वापरावे लागत आहे. गुरुवारी रामराईत सरपंच प्रवीण दुबिले, डॉ. ज्ञानेश्वर पा.निळ, माजी उपसरपंच नजीरखाँ पठाण, युनायटेड ब्रेव्हरेज कंपनीचे सुधीर सिंग, वंदना काकडे, दिलासा जनविकास प्रतिष्ठानचे प्रवीण धायगे, पंचलू पाने, प्रवीण कुऱ्हे, तेजराव पवार आदींच्या उपस्थितीत रामराई व रामराईवाडीतील १३५ कुटुंबांना वॉटर प्युरिफायर यंत्राचे वाटप करण्यात आले. कार्यक्रमाला ग्रामपंचायत सदस्य पंडित पनाड, सुरेश सरोदे, हरिभाऊ काजळे, ज्ञानेश्वर कडिले, विलास नरवडे, रमेश सोनकांबळे, कलीम शहा, भाऊसाहेब वाघमारे, कैलास चिलावल, सुरेश चिलवाल, सुरेश वाघमारे, दिगंबर देवकर, विक्रम भराड, नामदेव पवार, कृष्णा सोनवणे, भानुदास माळी आदींसह ग्रामस्थांची मोठ्या संख्येने उपस्थिती होती. इतर कंपन्यांनीही सामाजिक बांधिलकी जोपासण्यासाठी पुढाकार घेण्याचे आवाहन करण्यात आले.

रामराई व रामराईवाडीतील प्रत्येक कुटुंबाला शुद्ध पाणी मिळावे, यासाठी जलशुद्धीकरण यंत्राच्या वाटपप्रसंगी सरपंच प्रवीण दुबिले, डॉ.ज्ञानेश्वर नीळ, नजीरखाँ पठाण व अधिकारी.

जागरूकतेतून पुढाकार

- नागरिकांना पिण्यासाठी शुद्ध पाणी मिळावे, यासाठी सरपंच प्रवीण दुबिले, उपसरपंच मंगलाबाई नीळ, ग्रामविकास अधिकारी एस. एन. रोहकले, माजी उपसरपंच नजीरखाँ पठाण व दिलासा जनविकास प्रतिष्ठानच्या वतीने जोगेश्वरी ग्रामपंचायतअंतर्गत येणाऱ्या कारखान्यांनी शुद्ध पाणीपुरवठ्यासाठी मदत करावी, यासाठी पाठपुरावा केला होता.
- या पाठपुराव्यामुळे वाळूज एमआयडीसीतील युनायटेड ब्रेव्हरेज या कंपनीने सामाजिक बांधिलकी जोपासत रामराई, रामराईवाडी व कमळापूरातील नागरिकांना मोफत वॉटर प्युरिफायर यंत्र वाटप करण्याचा निर्णय घेतला आहे.

कमळापुरात ३० मे रोजी वाटप

- गुरुवारी रामराई व रामराईवाडीतील नागरिकांना यंत्राचे वाटप करण्यात आले. ३० मे रोजी कमळापुरातील ४३० कुटुंबांना वॉटर प्युरिफायर यंत्राचे वाटप करण्यात येणार आहे.

6

Improving Livelihood Generation through Drought Proofing : CSR of EdleGive Foundation

People living in the drought prone regions of the country face many adversities, which affect them both socially and economically. Dilasa has been instrumental in addressing these challenges of the rural poor in Maharashtra. In a novel initiative to provide solace to the drought affected villagers of Aliyabad, the EdelGive foundation and Dilasa joined hands in January 2016 to implement a drought-proofing project. Aliyabad village with a population of around 15200 people belong to the Tuljapur block. The major income generating activity is agriculture even though the watershed has been facing severe drought for last four years. Out of the total 1000 ha, barren land constitutes 200 ha. The in the Kharif season 800 ha is cropped while only 300 ha is cropped in Rabi season. The major water sources in this region are wells, bore wells and ponds. The Bori river flows in the North-West to South-West direction of the village. The cropping areas are distributed near the banks of the river.

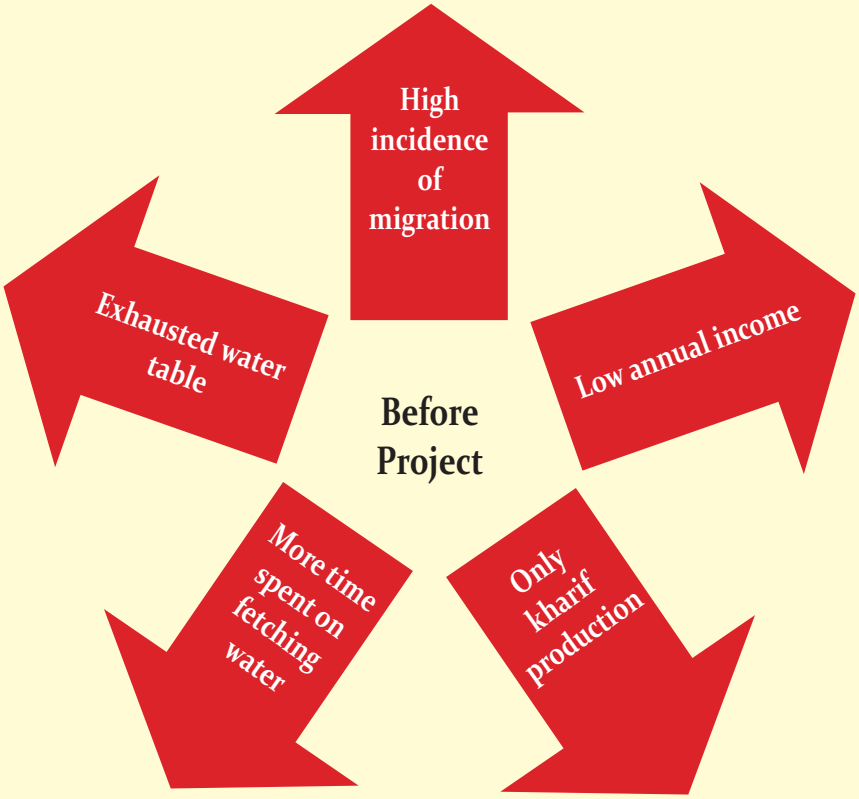
The scarcity of water over a prolonged period had affected the backbone of agriculture in the village. The farmers were able to crop only during the Kharif season and then the lands were left fallow. This not only affected the income and food security, but spread its impact on their livelihood also. The lack of work during non-rainy period forced people to migrate to other regions and work for lower wages. Though the villagers were enthusiastic about cultivating other crops like vegetables, spices, cash crops and grapes, the unavailability of water played the limiting factor to their ambitions. Dilasa was presented with a scenario wherein both a solution for the scarcity of water was required and at the same time, the activity should be able to enhance the livelihood opportunities of the people in the shortest time frame.

Dilasa involved in multiple talks with the villagers and focus group discussions to thoroughly understand the situation and needs of the people. The construction of water storage structures emerged as a viable solution to address the two-pronged issue of water scarcity and livelihood security. Such a sustainable solution had the power to improve the ecological and economic situation of the village. The preliminary survey of the water resources of the village by the members of the project team identified the scope for constructing Earthen Nalla Bunds and Loose Boulder Structures. While the ENB reduce the velocity of runoff and improves water percolation, the LBS reduces water runoff and soil erosion. Together, they improve the moisture condition of the soil.

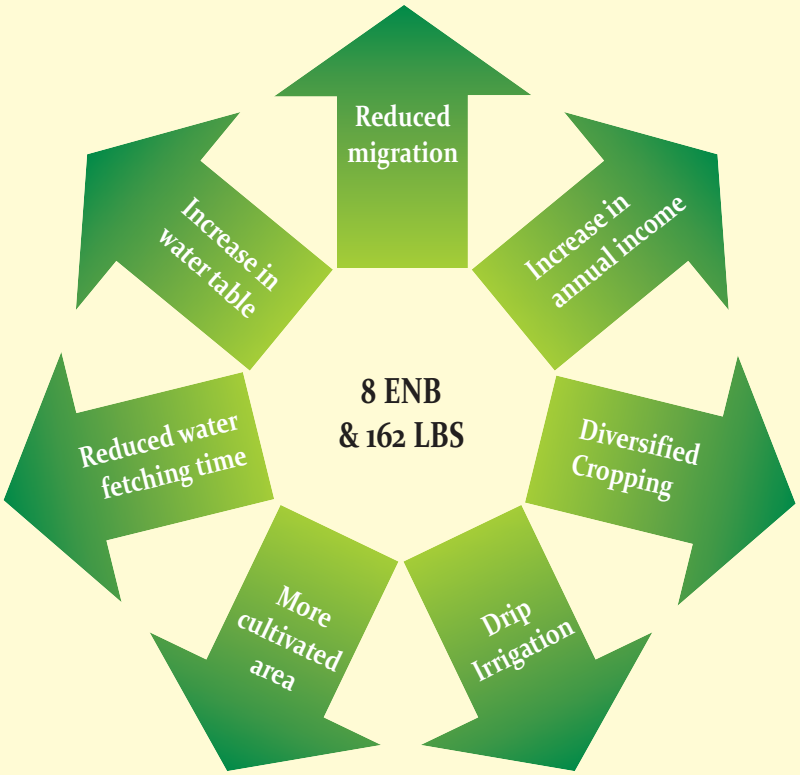
The plan for construction of **8** Earthen Nala Bund (ENB) and **162** Loose Boulder Structure (LBS) were carried out with active participation from the villagers. The enthusiasms of the villagers lead to fast completion of baseline surveys and selection of sites for 8 ENB and 162 LBS. The villagers were able to reap early benefits from the project as half of the construction activities were finished and became operational prior to the pre monsoonal showers. By the end of September 2016, fully functional storages were in place.

4 Both Dilasa and EdelGive foundation believes that the success of a project is not measured by the amount of money spent on it, but by the positive impact it has on the lives of the people. Therefore, it is necessary to measure these impacts. For this purpose, an impact evaluation of the project was carried out. The evaluation revealed that not only the aims of the project were fulfilled; it also helped the villages in multiple ways. The major issue faced by the people was the drying up of nearby wells and ponds during dry seasons. Even when the project was half way through implementation, a non-functional aquifer became active. The beneficiaries observed that water was available in the dug wells also for longer periods. This in fact gave a new breath to the farmers, who are now planning to increase their kharif production by bringing in more area under cultivation. There has been more diversification in agricultural activities and it showed an increase of 53% in the annual family income from the same.

Many farmers started installing drip irrigation systems to cultivate vegetables and grapes. At the same time, the strong monsoonal showers in the year 2016 have raised the hope of people as they have stored water for the upcoming crop season.



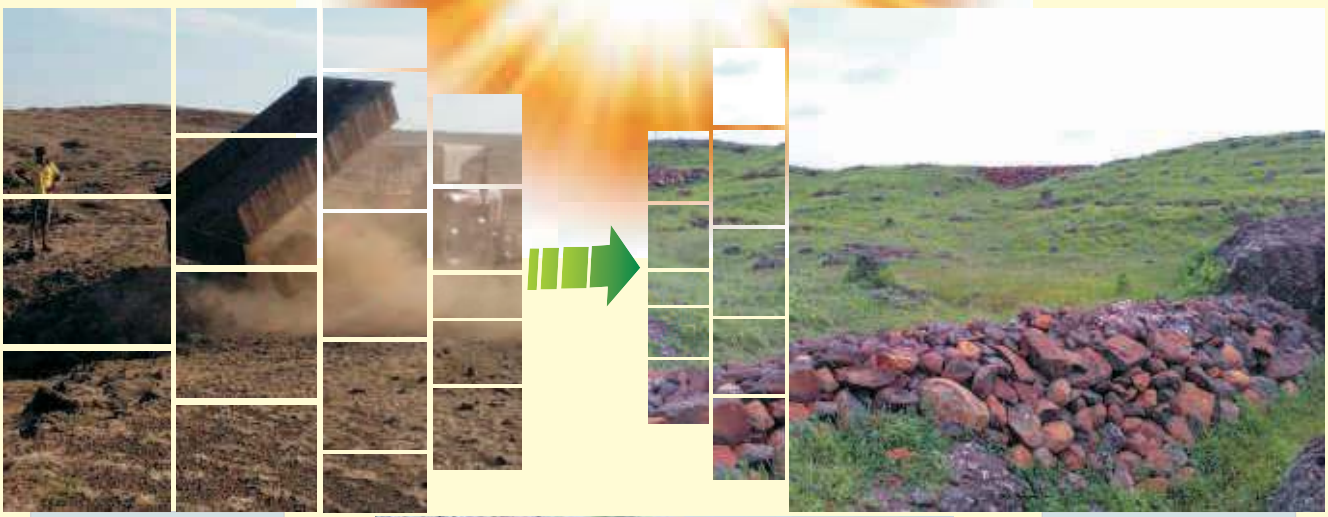
Quick look through the impacts of the project



Before the Construction of Earthen Nalla Bund

After the Construction of Earthen Nalla Bund

Through the Transition

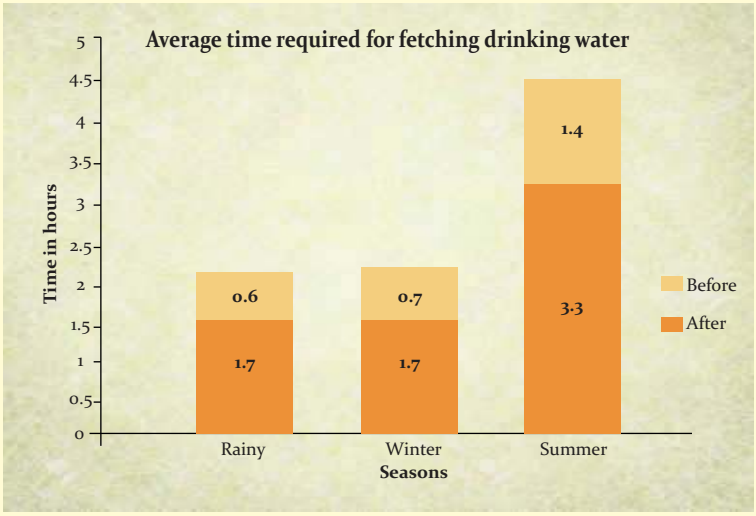


Before the Construction of Loose Boulder Structure

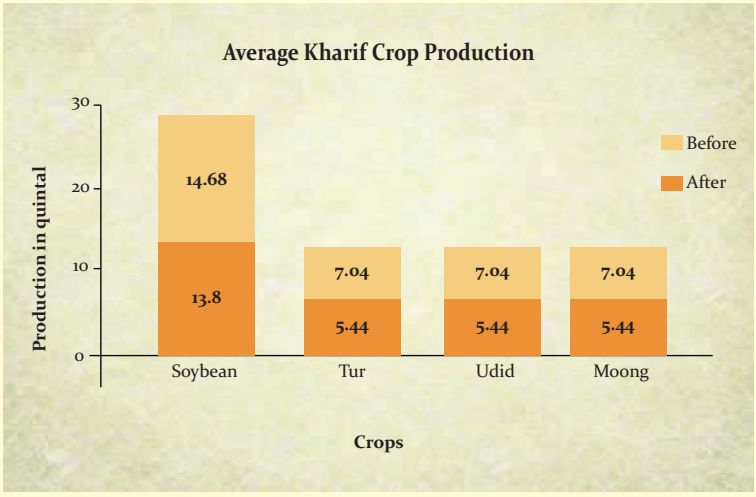
After the Construction of Loose Boulder Structure

The role played by water in various spheres of life is incomprehensible. The women and girls of the villages are also happy as they can spend more time on studies and other activities as the time spent on fetching water has reduced measurably. Incidentally, it was found that the migration rates came down drastically during the project period, mostly because people found job in the various activities related to the project and they expressed their gratitude to the EdelGive foundation for the timely payment of wages.

There was a visible change in the appearance of the village and lives of the people of Aliyabad from that of the nearby Ramteerth village after the implementation of the project. Aliyabad was marked with lush greenery even six months after rainfall.



The success of this project, which covered a period of one year (January 2016- December 2016), has been that it was able to create a direct change in different spheres of life of the people in Aliyabad village. In one hand, it helped in improving the water table and existing agricultural production in the region and on the other hand, it helped people to improve their livelihood by giving them an opportunity to diversify into other activities. It also created unquantifiable changes like the awareness creation regarding conservation and empowering people to face the challenges posed by water scarcity.



7

Ghotka Watershed Development Programme: NABARD & MCX

Introduction

Ghotka Watershed is located at a distance of 14 km from Loha situated in Nanded District. The watershed is located on the boundary line of Nanded and Latur District. Socially the Ghotka is dominated by Buddhist and Maratha Communities.

The Ghotka watershed characterized by seasonally erratic rainfall, low agricultural productivity, degraded natural resources and low economic status. According to the social survey conducted the total population of Ghotka is 1799 covering 327 families. Average land holding per household is around 5 ha. area drains from south to north towords Limboli River. The average annual rainfall is 530 mm. Major cropping pattern is Bajara, Jawar, Maize, Soyabean in Kharif season followed by Wheat, Jowar, Onion, Maize in Rabi season and fodder.

With the analysis of all situation and degraded natural resources, Dilasa team identified Ghotka watershed unit for technical efforts to conserve soil and maximized the utilization of surface and subsurface water for crop production. The major treatments are area treatment of 1073 hectares, Dry land horticulture is 99.23 hectares and agro-horticulture is 33 hectares in addition to other watershed development activities.

Total Sanction Area 1756

Project Period 1 April 2016 to 31 March 2020

Capacity Building

Dilasa has created awareness among the community about importance of watershed development as entry point activity. Dilasa has organized series of meetings and trainings in the area. The purpose is to sensitize the villagers towards execution of watershed works through formation village level watershed committee (VWC). Accordingly, Dilasa has formed one VWC and arranged their exposure visit to successfully completed Aliyabad watershed project on 26/07/2016.

Impact of this intervention is that villagers are aware about importance of soil & water

conservation activities and its long term impact on agriculture productivity and water availability for irrigation & drinking purpose.

Farm Bunding

Dilasa has completed total farm bunding covering 350 hectare of farm area with active participation of villagers. The villagers have contributed in the form of shramdan. Villagers were very enthusiastic to work as the area was suffering from continues drought and they very happy due to employment generation in their area.

Impact of this intervention is that more than 10% area i.e. 12 hectare comes under Rabi season for cultivation which was idle before completing farm bunding. The farmers will get additional income of more than Rs. 6.0 lakhs by cultivating wheat & gram during this Rabi season and this land will be continuously used for coming Kharif season also. It means we bring the land of 12 hectare under cultivation due to the farm bunding interventions.

Stone Bunding

Stone bunding is soil conservation measure of land to conserve soil and to maintain soil fertility. This activity is being undertaken where the land is rocky and more numbers of stones are available. It also helps to fence the land and protect from animals. Under this project, we have completed stone bunding of 100 hectare land.

Stone Outlets (SOs)

Stone outlets are being prepared at 1to 3 locations in one hectare to drain out the excess deposited water in land. This also helps to avoid damage of bundings (farm bunding/stone bunding) and water can easily drain out from field though these stone outlets. Under this project, we have prepared total 560 stone outlets along with bunding/stone bundings.

Plantation & Seedlings

We have completed plantation and seeding on 123 hectare area. This helps in retention of soil & moisture in the area which helps in increasing water table height. In long term this will help to reduce the soil erosion & prevent land to become barren.

Continuous Contour Trenches (CCT)

We have completed continuous contour trenches (CCT) on hilly area as a part of watershed treatment to prevent soil erosion & water conservations on hillock area which ultimately effect on lower stream i.e. on agriculture cultivable land. The total area treated under CCT is more than 13 hectare.

The **impact** is that area is lush with green vegetation and reduced soil erosions. Dilasa has executed all the activities as per technical specifications and under supervision of technical experts such as watershed engineer, agronomist, community Mobilizers etc.

Help in Employment Generation

Apart from soil & water conservation works, project is able to generate employment for villagers during critical period. Most of villagers have got their employment for the period of almost five months. This is one of the major impacts of the project apart from increasing agriculture productivity and increase in area under cultivation.

8

Promotion of Climate Smart Agriculture : SRI
A CSR of RBL Bank Ltd

Introduction

India is one of the world's largest producers of rice, accounting for 20% of all world rice production. Rice is India's pre-eminent crop, and is the staple food of the people of the eastern and southern parts of the country. Rice being a tropical plant flourishes comfortably in hot and humid climate.

Even though India rank number one in the area and production of rice (104.8 million tonnes) the productivity of rice is very low (2390 Kg/ha in 2014-2015) compared to world average (4250 Kg/ha). This varies from state to state with Punjab having the highest productivity. Maharashtra is one among the major rice growing states in India but having a low productivity compared to states like Punjab, Tamil Nadu, Haryana, Andhra Pradesh etc. The improper management practices and use of low yielding verities are some of the main reasons for low productivity of rice India.

With the increase in global temperature due to climate change the productivity of rice tends to decline further. The Intergovernmental Panel on Climate Change (IPCC) Fifth Assessment Report (AR5) points out that the effects of climate change will aggravate the situations further if proper adoptive measures are not followed. So it is important to equip our farmers with new adaptive technologies, in order to adapt them to the adverse effects of climate change.

Under this scenario, the System of Rice Intensification (SRI) offered a great opportunity to paddy cultivation that can be considered as an effective tool for sustainable agricultural production which can mitigate the effects of climate change to a great extent. This is a system developed by Father Henri de Laulanié, first in the Madagascar and later spread to other parts of the world. This technique is based on four major principles like i) early transplanting of seedling at two leaf stage (8-12 days old), ii) reduced plant density through proper spacing (25 cm or more in square pattern), iii) improved soil conditions through enrichment with organic matter iv) reduced and controlled water application (almost 50 % less than other methods). SRI is perhaps the best option available to the farmers particularly the small and marginal farmers to promote community led agriculture growth, while managing all the inputs effectively.

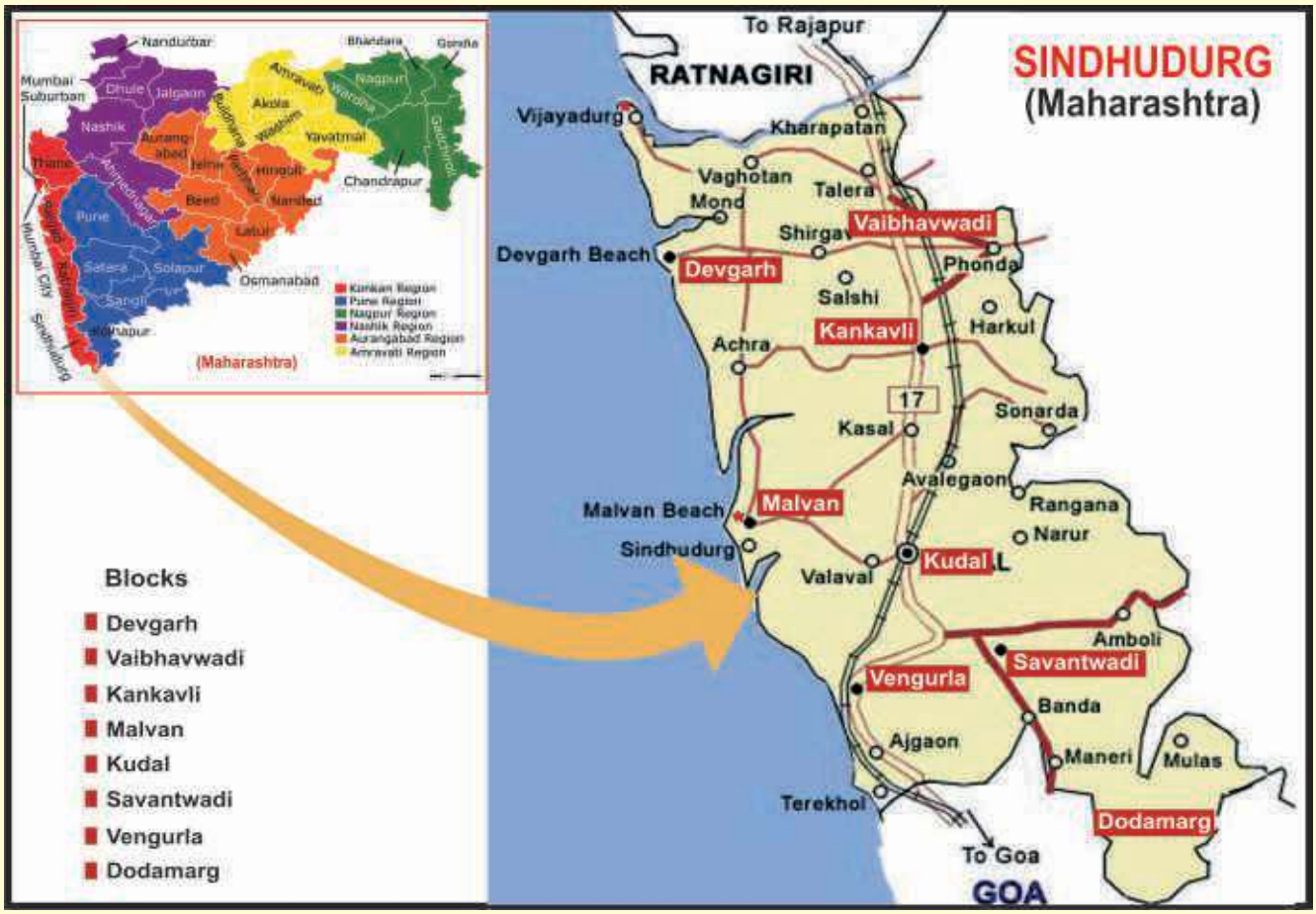
RBL Bank Ltd is one of the leading private sector Bank in India which focuses on spreading climate smart agricultural practices under its Corporate Social Responsibility (CSR) programme. RBL Bank Ltd has come forward to promote SRI technique among rice growing farmers of Sindhudurg district of Maharashtra as part of their CSR programme. RBL Bank Ltd has provided a vision to change the farmers' mindset regarding the cultivation of paddy so that they can have more benefit as compared to their monotonous traditional activities that are followed in paddy cultivation. Dilasa with its team has made a drastic change at the ground level about the paddy cultivation by conducting capacity building and awareness programmes, reaching out farmers by village meetings, exposure visits to the demonstration plots, and on field trainings.

Project Summary

The SRI project is being implemented in the Sindhudurg district which lies in the southern part of Konkan region of Maharashtra State. With an area of 5207 Sq. km. (5,03,950 hectare), it occupies 1.69 percent of the total area of Maharashtra. The district lies about 50-150 meters above mean Sea level (MSL) and covers 121 km. of the total 720 km. the coastal length of Maharashtra. The rural population in the district faces several challenges in the form of low employment opportunities, lack of access to income generating resources, fragmented land holding and other issues such as fragmented land holdings etc. Farming is the primary occupation for a majority of local individuals, thereby making agriculture the key livelihood source in the district. The main crop grown in the district is paddy (representing 90% of the crops grown in the district and used in the majority of cases for self-consumption). The secondary crops in the district include cashew, mango, coconut, kokum and other fruits plantations. Cashew processing and fishing related activities are some of the other predominant traditional economic activities.

Across the globe, rice cultivation is in crisis and Sindhudurg is no exception, with a shrinking area, fluctuating annual production, stagnating yields and escalating input costs. The per acre yield is also less compared to other regions. The cost of cultivation of paddy has consistently been increasing owing to the rising costs of seeds, fertilizers, and labor. With increasing labor scarcity due to urbanization, sustaining the interest of farmers in rice cultivation has become a challenge

(migration has been the major issue). However, with the advent of SRI, an exciting approach had been discovered, which not only reduces the use of inputs but also increases yields significantly and enhances the livelihoods of farmers. SRI being variety neutral does not call for use of any specific seed.



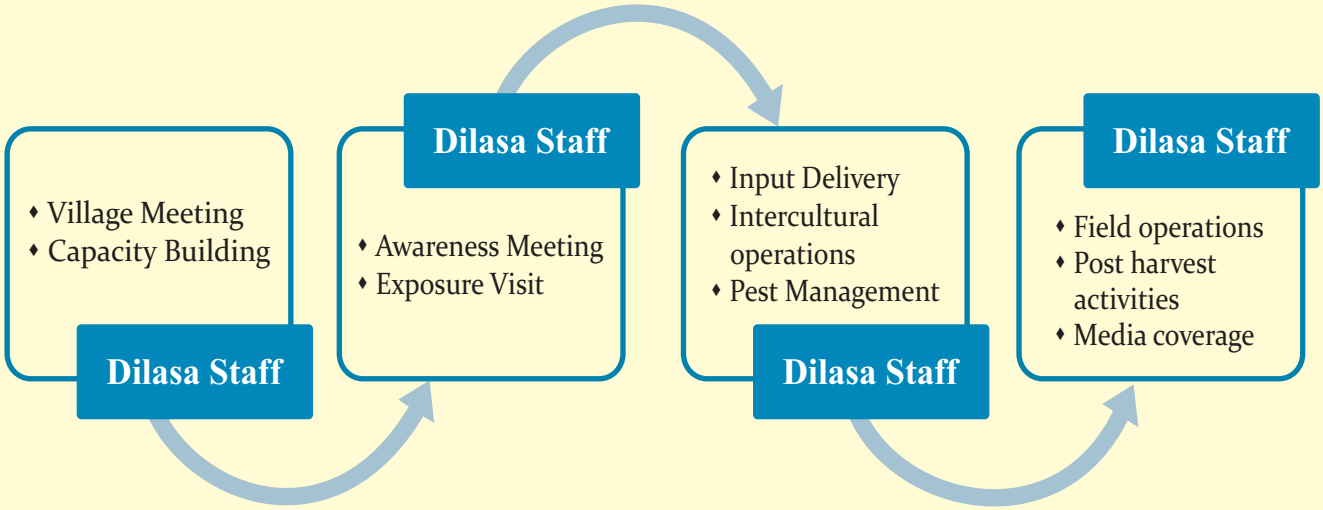
Kharif

Sr.No.	Taluka	No. of Beneficiaries	No. of Villages	Area (ha.)
1	Kudal	233	58	61.50
2	Malwan	239	44	35.26
3	Vengurla	107	16	27.01
4	Kankawali	127	27	22.45
5	Sawantwadi	145	32	35.26
6	Vaibhavwadi	96	12	18.46
7	Deogad	70	22	7.74
8	Dodamarg	18	11	2,61
	Total	1035	222	210.29

Rabi

Sr.No.	Taluka	No. of Villages	No. of Beneficiaries	Area (ha.)
1	Dodamarg	7	90	27.42
2	Kankawali	10	35	6.20
3	Kudal	16	95	28.80
4	Malwan	8	92	28.20
5	Sawantwadi	7	65	17.89
6	Vengurla	7	104	22
	Total	55	481	130.54

The project has aimed at the popularizing the System of Rice Intensification (SRI) amongst the farmers in such a way that they became self sustained and self reliable. Starting from the capacity building to the harvesting, Dilasa is taking part in each and every steps to accomplish the farmers in all the way of paddy cultivation.



In each and every part Dilasa has its significant role to play that it is supporting farmer in a long way and this has proven to be a great change in the agriculture scenario of paddy growing state.

Under the project, the focus was to guide and to provide handhold support to the target beneficiaries throughout the Kharif and Rabi season right from sowing till harvest. The size and scope of farmers will not be predetermined but will follow a demand led process. Depending on the capacity, maturity and needs these beneficiary farmers have been provided training for Paddy cultivation.

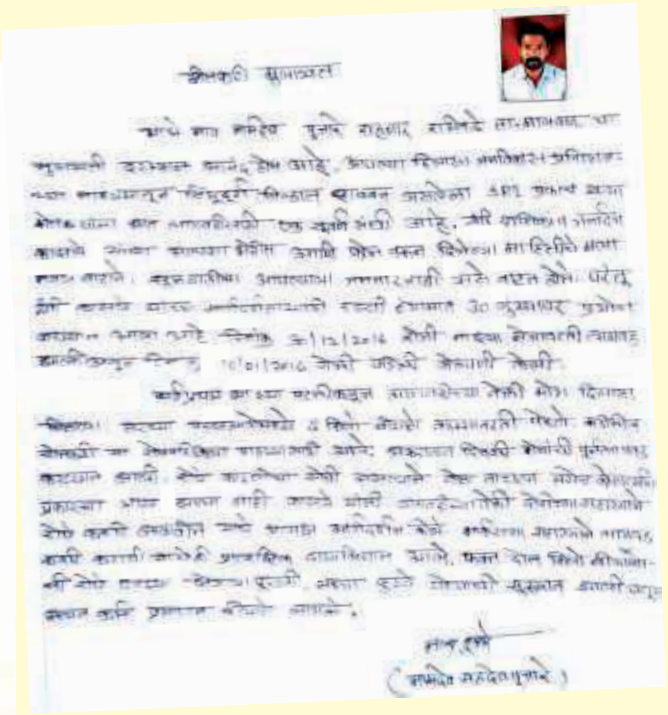
Relevance of SRI for Climate Change

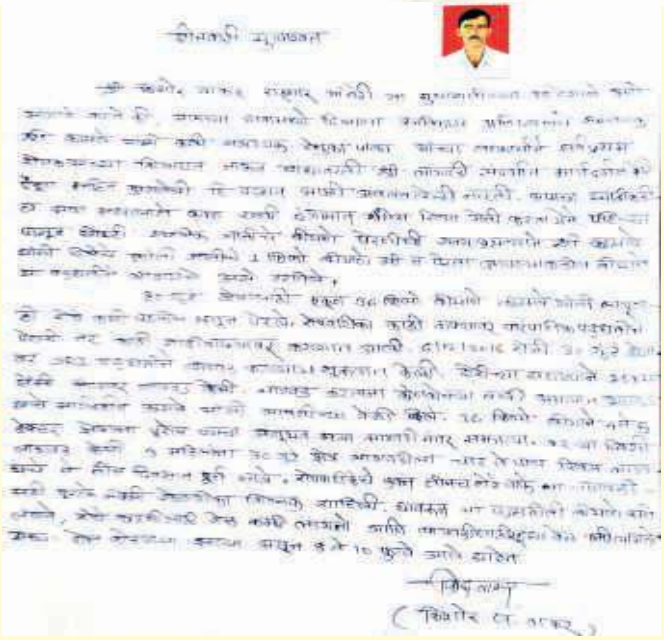
- SRI has significant climate implications in terms of adaptation to climate change and mitigation of climate change.
- Improvement in soil quality and soil biota.
- Helps to reduce resource degradation by saving precious surface and groundwater.
- Re-establishing nursery with minimum input cost in case of natural calamities.
- Saving of input cost in seeds up to 70%.
- Soil carbon sequestration and other climate change mitigation benefits i.e. reduction in methane and other Green House Gas (GHGs).
- Improved drought resistance.
- SRI plants require less irrigation water (30% to 50%) per land area due to deeper, larger root system.
- Organic matter enriched soils able to store more water and furnish nutrients.
- Higher pest and disease resistance due to stronger, healthier plants and less humidity in the land canopy.
- Reduced greenhouse gas emission from paddy fields.





Beneficiaries Feedback





9

Combating against Drought : A step towards "Sustainable Development" - A CSR of United Breweries Ltd

Background

Sultanwadi is a tiny village situated in Phulambri Block of Aurangabad district. Due to persistent shortage of water, food and fodder Phulambri block fall under high priority zone. Several factors like drought, watershed and environmental degradation, climate change etc., are putting water resources under increasing pressure. Predominantly Agriculture is considered as the prime occupation in this village. Villagers cultivate only dry land crops like Maize, Bajra & Tur which needs less water. As a result of land degradation & water shortage, agricultural productivity is not good in this village. Less availability of water is not allowing them to change their cropping pattern. Migration rate is very high i.e., for about 7 to 12 months. Availability of well water is also very negligible. Thus villagers have to depend completely on rains.

Often the burden of inadequate access to water fall heavily on girls and women. One of the major concerns is to reduce many hours' women and girls spend seeking water for their families, which often put their safety at risk.

Taking all these into contemplation, Dilasa Janvikas Pratishthan joined hands with United Breweries to ensure the availability of water in the village.

"Ridge to Valley" approach is applied for executing soil & water conservation measures in the selected watershed area as 80 – 90% comes under rain fed agriculture. A land lying in a valley cannot be improved if the land at upper reaches is not treated. Thereby, project has been initiated with the works of "Ridge" line treatments i.e., waste land treatments like Continuous Contour Trenches (CCT), Water Absorption Trenches (WAT), Earthen Gully Plug (EGP), Gully Plugs (GP) & followed by drainage line treatments like Loose Boulder Structure, Gabion & Earthen Nala Bund (ENB).

Soil & Water Conservation

Continuous Contour Trench (CCT)

Soil erosion is the major cause of land degradation which results in removal of major nutrients. It further is resulting in loss of organic matter affecting crop productivity. Thereby it is necessary to protect the top soil. CCTs are best suited for moisture conservations in regions where rainfall is very less. Trenches are dug along the contour lines and run perpendicular to the flow of the water. Water is retained by the trenches and is infiltrating the soil below which further reduces soil erosion. Excavation of trenches on contour lines has been done by JCB. Finishing work has been done by labour. Dimension of CCT: are 45 cm in depth and 60 cm in width which in turn can store huge quantity of water.

Earthen Gully Plug - EGP

Earthen Gully Plugs are small structures constructed across the gullies. Initially foundation work takes place. Once it is filled with earthen material, watering and compacting is done. It is then followed by collection of stones from the nearby areas and with the help of stones pitching is done. This activity is entirely done by only labour.

Impact

- Reduce in water velocity
- Reduce in soil erosion

Gully Plug - GP

Gully plug is a small, temporary structure constructed by stones across drainage. These structures are built on the upper reaches by collecting the stones. Dimension of GP: 50cm in width and 75cm in depth.

Impact

- Reduces the speed of run-off
- Prevents soil erosion
- Helps in groundwater recharge
- Helps in retaining soil moisture.

Loose Boulder Structure

Gully plug is a small, temporary structure constructed by stones across drainage. These structures are built on the upper reaches by collecting the stones. Dimension of GP: 50cm in width and 75cm in depth.

Impact

- Reduces the speed of run-off
- Prevents soil erosion
- Helps in groundwater recharge
- Helps in retaining soil moisture.

Gabion Structure

This is the type of loose boulder structure bound in wire mesh. It provides the temporary water storage and also soil conservation. It is basically the silt trap structure which also holds the water storage after first rainy season. These are constructed where velocity & volume of run-off is high. Gabion structures are constructed before cement nala bund or earthen nala bund structures to avoid the siltation in the structures.

Earthen Nalla Bund (ENB)

ENB is constructed across drainage line for increasing water percolation and improving soil moisture. This is a water harvesting structure. The main objective of it is surface runoff coming from for catchments and to increase percolation of stored water to raise ground water level. It is made up of earthen material. There is a provision to let excess water go through the outlet. These structures also serve as percolation reservoirs in the upper catchment.

Impact:

- Ground water recharge
- Crops can be sown in Rabi season

Community Mobilization Activities

Rain Guage Installation

This was installed to measure the amount of rainfall in the Sultanwadi. It is useful to the villagers for conducting water audit of the village. This is basically a measuring cylinder, which collects the rain and is placed inside the cylindrical container. Along with the installation, beneficiary has been trained on how to count the every day rains in the coming season. It is instructed to place under the open sky on level ground ensuring no obstructions such as trees as these will disrupt the measurements. It is also told to place it preferably on the top of the building. This is very important as to compare block level figures with village level rains. Moreover, it is the base for the prospective water audit of the village.

Azolla Demonstration

A Sustainable Feed for Livestock: Azolla, an aquatic floating fern is very rich in proteins, essential amino acids, vitamins, growth promoter intermediaries and minerals. It is easily digestible by the livestock.

Bed Preparation: A water body is made, preferably under the shade of the tree, with the help of the HDPE UV stabilized fabric sheet which is specially designed to culture the azolla floating fern. Initially a pit of 2m * 2m * 0.2m is dug on which the fabric sheet that is resistant to the UV radiation in sunlight is positioned. It was also ensured that all the corners of the pit are at the same level so that an uniform water level can be maintained. It will be then instructed to them that 10kgs of soil need to be kept, then water up to 4 inches need to be filled and then finally cow dung along super phosphate need to be mixed.

In order to promote this, Community Mobilizer has identified the beneficiary and will demonstrate the Azolla in the coming months.

Convergence

Approach Road

With the onset of works in Sultanwadi, villagers have approached Dilasa and have proposed regarding the approach road construction adjoining Daregaon Dari a nearby village. They have shared the concern with our team and the problems they are facing because of it. At present, they have to travel approx. 25kms to sell their market produce or to visit hospitals and especially in rainy season it would be more difficult for them. With the construction of road, their quality of life would be improved.

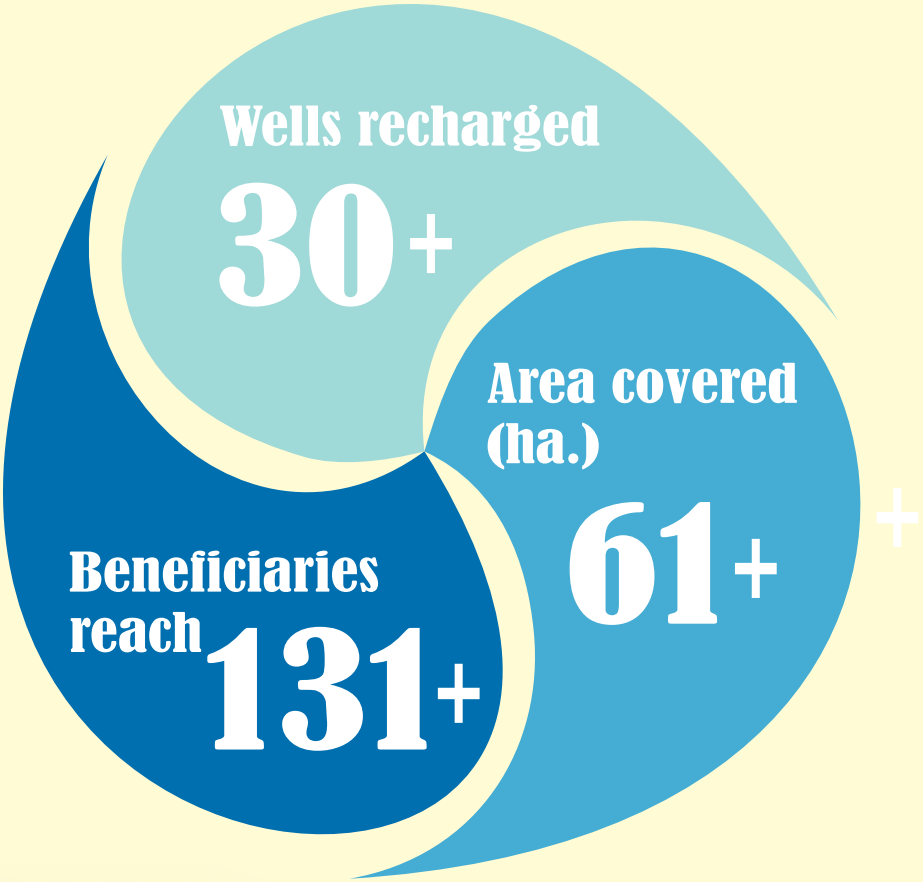
Thus Dilasa is trying to do this activity under convergence with Government, and community participation share from Sultanwadi and Dilasa's contribution preferably.

Geo-Tagging with Google Earth

Geo-tagging of all the completed structures was done on a virtual map during the month of February 2017.Greenery in the image shows the farmlands of Sultanwadi and remaining part comprises of the wasteland, forestland and fallow land.

A solid yellow line in the image shows the boundary of the village. Image also shows the hilly area in the North-West-South direction of Sultanwadi where Continuous Contour Trenches has been done. As shown in the image, intense works are done as part of ridgeline treatments to capture the impact immediately. At a later date its impact would be clearly shown.

PERCEIVED IMPACT
(Due to construction)



From the heart of beneficiaries

"Thanks to United Breweries & Dilasa for taking our village in constructing water storage structures. Now that migration will be reduced and people will get more work in our village. Dilasa is also trying to construct road which will connect six villages reducing the burden of villagers. Due to these treatments wells will get recharged and water will be made available for long term."

Shivaji Gitaram Shinde, Sarpanch

"Thanks to UB team for giving rain guage for measuring rainfall and was told its applicable. Earlier we had to go to Phulambri block and wait for long to know the rainfall details. Now entire village can get benefitted through this device. We can also compare with block level data. This device will help us during farming season activities."

Rameshwar Sahebrao Shinde

"Earlier we had no water storage structures in our village. Thanks to United Breweries for coming forward and implementing water conservation structures in the village. People are enthusiastic in being part of developing the village. Due to hillock treatment soil erosion will be reduced eventually and agriculture productivity will be increased."

Mahadu Shenfad Shinde

Achievements

Sr.No.	Activity/Structure	Unit	Planned	Achieved
	Soil & Water Conservation Activities			
1	Continuous Contour Trench (CCT)	ha	22.96	22.96
2	Water Absorption Trench (WAT)	Running Meter	1000	1000
3	Earthen Gully Plug (EGP)	Nos.	10	10
4	Gully Plug (GP)	Nos.	20	20
5	Loose Boulder Structure (LBS)	Nos.	2	2
6	Earthen Nala Bund (ENB)	Nos.	2	2
7	Gabion	Nos.	1	1
	Community Mobilization Activities			
8	Installation of Rain Gauge	Nos.	1	1
9	Azolla Demonstration	Nos.	1	
	Convergence			
10	Approach Road Construction	km	1	



Water Storage Potential Created

Type of Structure	Water Storage (ltr)
 Continuous Contour Trench	13477060.8
 Water Absorption Trench	1000000
 Loose Boulder Structure	144000
 Gabion	96000
 Earthen Gully Plug	750000
 Gully Plug	375000
 Earthen Nalla Bund	12000000
TOTAL	27842060.80

10
Drinking water in severe drought: CAF India

Introduction

Marathwada region, which is one of the backward regions in Maharashtra, is reeling under severe drought conditions since the last 4 years. The situation is more severe in Osmanabad, Beed and Latur districts. In the last one year, a staggering 3228 farmers committed suicide in this region alone. In the first three months of 2016, the figure has touched 350 and on an average nine farmers are committing suicides every day in the region.

Drinking water is a major concern, especially in the Marathwada region, where reservoir water levels are down to 5% of the full storage capacity. The intervention time is very limited as the water levels are drastically dwindling every day and resources are limited. Even though the Government has been supplying water to the region, the efforts were not enough to mitigate the severe drought in these regions. The regular supply of safe drinking water is a necessity at a household level to ensure the healthy living of the people.

CAF Charities Aid Foundation India

About the Project

This project supported by CAF India provided safe drinking water in 10 villages of Gangapur block of Maharashtra. The interventions helped to complement the Government's efforts and provided safe drinking water to the villagers through supply of potable water. The recurrent drought has also resulted in crop losses estimated at 17% in the Marathwada region, making it very difficult for the economically weaker families to afford even basic needs like drinking water to sustain themselves. The provisions of safe drinking water provide them a ray of support to sustain their livelihood properly.

Through this intervention the needy families affected by drought in the ten villages' viz. in Gangapur block of Aurangabad district were benefited. The villages are dominated by the tribal community.

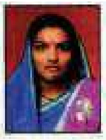
Sr. No.	Villages	No. of Households	No. of Beneficiaries
1	Kobapur	350	750
2	Sheripurwadi	100	450
3	Nathwasti (Golatgaon)	150	450
4	Golegaon	150	550
5	Bhoegaon	300	850
6	Jikthan	250	2000
7	Dighi	350	2200
8	Padampur	80	600
9	Kankuri	150	2600
10	Korghad	150	1800
	TOTAL	2030	12250

Supported Interventions

100 liters of water was distributed to each families per day (25 lts/person/day) as per standards, which was sufficient to meet drinking water requirements and domestic water requirements. The comprehensive distribution approach of water was taken into account logistical, social and behavioral elements. A range of allied activities has been carried out that includes the aspects below.

- **Assurance of water quality:** Water testing has been carried out before distribution to ensure it is of drinking standards. The water testing has been done for the three sources from where tanker collect water for distribution.
- **Reaching out to the most vulnerable:** The initiative was taken to reach every family in the village, with an emphasis on inclusion of most backward communities living in clusters on the outskirts.
- **Positioning of tankers and distribution process:** The tanker spread and distribution points across villages have been done in such a way as to ensure easy access for all families. This will be within 500 meter distance from farthest family. A record has been also maintained by community mobilizer with signatures from families at the time of delivery, ensuring smooth process of distribution.
- **Enhancing awareness on safe water practices:** An outreach campaign on safe water practices, proper water storage, health & hygiene has been continuously run alongside the distribution.

Beneficiaries Feedback



सरपंच – प्रतिमा बाबासाहेब काळे
गावाची – कनकोरी

या पत्राद्वारे आभार व्यक्त करण्यात येते की, आमच्या गावात शासकीय पाणीपुरवठा बंद होता. तरी काही कारणास्तव गावात भासल्यामुळे आम्हाला कॅफ इंडिया व दिलासा जनविकास प्रतिष्ठान यांनी आम्हाला स्वच्छ पाणी उपलब्ध करून दिल्याबद्दल सर्व कनकोरी ग्रामस्थांच्या वतीने त्यांचे मनपूर्वक आभार व्यक्त करीत आहोत.

कालावधी - 13/6/2016 ते 6/7/2016 (24 दिवस)

गावाची – कोळापूर

आम्ही समस्त कोळापूर ग्रामस्थ तर्फे कॅफ इंडिया यांचे धन्यवाद मानतो की त्यांनी 13/6/2016 ते 8/7/2016 पर्यंत आमच्या गावाला ज्या वेळी पाण्याची टंचाई होती तेव्हा आम्हाला पाणी उपलब्ध करून दिले व स्वच्छ पाणी मिळाल्यामुळे रोगराई पसरली नाही व त्यामुळे आम्ही दिलासा जनविकास प्रतिष्ठान यांचे मनःपूर्वक आभार व धन्यवाद व्यक्त करीत आहोत.

Media Coverage

Anjali Ritu Tiwari, Gangapur tehsildar Chandrakant Shelke, Dilasa president Dr Anagha Patil seen at the programme of drinking water distribution by CAF India and Dilasa, recently.

CAF, Dilasa distribute drinking water

Aurangabad, June 24: CAF India provided drinking water to 3500 families from 10 villages, namely Jigthan, Kolapur, Korgaad, Sherparwadi, Nathwadi, Dighi, Bokegaon, Kankuri, Padampur and Bhogpan in Gangapur block, which have been declared drought-hit by collector of Aurangabad.

Lauding Dilasa and CAF, Gangapur tehsildar Chandrakant Shelke said, "Dilasa took the initiative at the proper time. CAF initiated the water supply through tankers a week earlier." Dilasa president Dr Anagha Patil said, "Hazards in fetching water is a basic problem faced by women in drought-hit areas. Women are the biggest sufferers." Sarpanch of Jigthan Shaikh Nawaz Patel also praised the initiative. Dilasa marketing and business development manager Anjali Ritu Tiwari compered the programme and proposed a vote of thanks.

लोकमत समाचार
अपना औरंगाबाद
औरंगाबाद, गुरुवार 23 जून 2016

दस गांवों में टैंकरों से जलापूर्ति

11

Medicinal Crop Cultivation : A CSR of RBL Bank Ltd

Introduction

In India, for over 500 million people, traditional herbal medicines are the only alternative source, due to easy accessibility and lower price. This sector also provides employment to over one million traditional healers and Vaidyas in the country (Shankar, 1997). Thus, sustainable development of medicinal herbs provides an excellent opportunity to take advantage of the expanding market, while ensuring a steady supply to local communities. Generally, the villagers acquire basic knowledge about the use of various herbs from their elders and collect them fresh from their gardens or nearby forests, whenever they need them. However, with deforestation and commercialization of agriculture, many medicinal herbs are not easily available.

IEC material developed

RBL BANK

आरबीएल बँक लि.

आणि

दिलासा जनविकास प्रतिष्ठान यांच्या संयुक्त विद्यमाने

औषधी वनस्पती लागवड प्रकल्प

दिलासा जनविकास प्रतिष्ठान ही संस्था २२ वर्षांपासून ग्रामीण विकासासाठी कार्य करीत आहे. संस्था पाणलोट क्षेत्र विकास, पाणीपुरवठा योजना, भूजल संवर्धन, महिला बचत गटांचे स्वबळीकरण, उपजीविका गटांचे संघटन, उपवन संरक्षण समिती, गुणवत्तापूर्ण बियाणे संकलन, पर्यावरण संरक्षण तसेच कृषिपरक जनजागरण, अशी विविध कार्यक्रम राबवित आहे. पर्यावरण विकासासोबत महत्त्वपूर्ण योगदानबद्दल संस्थेला अनेक प्रतिष्ठेच्या पुरस्कारांनी सन्मानित करण्यात आले आहे. प्रोटेक्शन विलेज 'औषधी वनस्पती लागवडीचा प्रकल्प' रत्नाकर बँक लि.च्या सहकार्याने दिलासा संस्था राबवीत आहे.

१) अश्वगंधा

ही सर्वपरीचित, बहुगुणी वनस्पती आहे. पानापासून ते मुळांपर्यंती आहे. त्याची साद ३० ते १५० से. मी. पर्यंत होते. भारतातील मध्यप्रदेश, राजस्थान, छत्तीसगड, झारखंड, उत्तरप्रदेश इ. ठिकाणी अश्वगंधाची शेती केली जाते. साधारणपणे ५०० ते ७५० मी. मी. पाऊस पडणाऱ्या ठिकाणी ती पीक घेता येते.

- **उपयोगी भाग:** मुळे, पाने.
- **जमीन:** पाण्याची हमखास, मध्यम, लंबुसर, पाण्याचा निचरा होणारी जमीन असावी.
- **लागवड:** पाणी लागवड बियाण्यांपासून केली जाते. पावसाळी हंगामी ३ किलो बियाणे लागते. शेताला बी पेरून किंवा गादी वाफ्यावर रोपे करून रोपांद्वारे लागवड करता येते. लागवडीसाठी ऑगस्ट / सप्टेंबर महिना योग्य असतो. साधारणपुर्वी १० गड्डा कुजलेले शेणखत टाकावे.
- **आंतरमशागत:** आंतरमशागत ३० ते ३५ दिवसांनी करावी. दोन ते तीन खुरपण्या कराव्यात.
- **खते:** या वनस्पतीस अतिरिक्त कमी खते लागतात. शेणखत, कंपोस्ट खत वापरण्यास सांगा.
- **पाणी:** हे कमी पाण्यावर येणारे पीक आहे. निसर्गात पडणाऱ्या पावसावरही लागवड होऊ शकते. जमीन ओलसर झाल्यानंतर पाणी द्यावे.
- **काढणी:** पाणी काढणी लवकर म्हणजे ५-६ महिन्यात होते. पेरणीपासून १६० ते १८० दिवसांनंतर किंवा पाने तांबडसर पिवळी झाल्यावर काढणी करावी. पीक मुळासकट उपटून घ्यावे. नंतर वेगळी केली जातात. सुर्यप्रकाशात वाळवून त्याच्या वजनाच्या किंवा मुळांची बाजारात पाठवता येते.
- **उत्पादन:** ओल्या मुळांचे उत्पादन २ ते ३ क्विंटल प्रति एकर निघते. वाळलेल्याचे उत्पादन प्रति हेक्टरी ५० ते ७५ किलो असते.
- **उत्पादन खर्च:** साधारणपणे हेक्टरी ४०,००० रुपये उत्पादन खर्च असतो. प्रति हेक्टरी सरासरी नफा ५०,००० ते ६०,००० पर्यंत असतो.
- **औषधी गुणधर्म :** अश्वगंधाची मुळे अल्पांश गुणकारी असतात. अश्वगंधा, बलवर्धक, वातशामक, नर्वाईची बाद, सुक्ष्मजंतूंचे नाशवंतासाठी उत्पादन उपयुक्त तसेच मूत्रविकार, संधेदुखी, सूज, खोकला, दमा, ताप यासारखीही मुळांचा वापर केला जातो. जनावरांचे प्रमाणात बलवर्धक होतो.
- **बाजारभाव :** ९०० ते ९८० रुपये प्रति किलो. **निघणारी मुदत :** ६ महिने. **हमखी खर्च :** १४३५० रुपये

२) अडुळसा

ही सदाहरित वनस्पती असून २ ते ३ मीटर वाढते. त्यास महाऔषधी म्हटले जाते. ही उत्तम लोकप्रिय असलेली औषधी वनस्पती आहे.

- **उपयोगी भाग:** मुळ, पाने, फुले, फळे.
- **जमीन:** कोरगवाही प्रकारच्या जमिनीत पीक घेता येते. तरपण निचरा चांगला जमिनीतही हे पीक घेता येते.
- **लागवड:** बियांपासून पाणी लागवड केली जाते. साधारणपणे ६.० X ४५ सी.सी. अंतरावर ३ ते ४ किंवा पेरावा लागतात. जंगली वनस्पतीपासून लागवड करावयाची असल्यास पावसाळ्यात जंगलांपासून रोपे लावून करावीत. दीड महिन्यांची रोपे लागवडीसाठी वापरावीत.
- **खते:** जमिनीचा तसा पहून योग्य प्रमाणात शेणखत, कंपोस्ट खत जमिनीत मिसळावे.
- **आंतरमशागत:** गरजेनुसार तण काढावे.
- **पाणी:** लागवडीनंतर लगेच पहिले हेऊन त्यानंतर गरजेनुसार पाण्याच्या पाळ्या द्याव्यात.
- **काढणी:** मुळे योग्यवेळी सुरुवात झाल्यानंतर खालच्या भागातील पाने लवकर पिवळी पडतात. पाने पूर्ण पिवळ्यावर १०-१२ महिन्यांनी संपूर्ण झाडे उपटून घ्यावीत. काढणी पाने, फळे, मुळे वेगळी करून सावलीत वाळवावी. प्रत्येक भाग वेगळा ठेवून पाकार करावे.
- **उत्पादन खर्च :** .....
- **उत्पादन:** प्रत्येक झाडापासून सरासरी प्रत्येक तोडीस अंदाजे १ किलो पाने मिळतात. प्रति हेक्टरी पानांचे उत्पादन ५ ते ७ टन असते. मुळांचे उत्पादन ५०० ते ६०० किलो असते. अंदाजे हेक्टरी २५,००० ते ५०,००० रुपये एवढा नफा होऊ शकतो.
- **औषधी गुणधर्म :** अडुळसाची पाने कडू, तुरट असतो. अडुळसा तसा अनेक गिल दूर करण्यासाठी उपयुक्त आहे. तसेच त्वचा रोग, सर्दी, ताप, खोकला, दमा, रक्तविकार, संधेदुखी, पोटेदुखी, अतिसार, अपचनिल, मिरगिरा, मुळव्याध यासारखीही त्यांचा वापर केला जातो.

३) शतावरी

शतावरी ही तरंटरी वेल असून त्याची मुळे रंगाने पांढरी असून खोलवर अनेक मुळे येतात.

- **उपयोगी भाग:** मुळे.
- **जमीन:** पाण्याचा चांगला, भुसभुशीत, पाण्याचा निचरा होणारी जमीन असणे आवश्यक असते.
- **लागवड:** शतावरीची लागवड बियांपासून केली जाते. बियांवर रासायनिकप्रक्रिया केली असल्यास त्याचा वापर करावा. १० ते १५ दिवसांनंतर बी उगवते. त्यानंतर रोपांची लागवड केली जाते. अधिक उत्पादनासाठी रोपे ६.० X ६.० से. मी. वर लावावी. लावणी साधारणपणे २४ व्या महिन्यात करावी.
- **खते:** पावसाळी ४ ते ५ टन प्रति हेक्टरी शेणखत लागवडीपूर्वी जमिनीत मिसळावे. पहा-जानेवारीचे खताची उपयुक्त असते.

- **आंतरमशागत:** लागवडीनंतर १० दिवसांनी निंदणी करावी. पेरे उद्भवणा बांधू, वरंब्यांचा आधार द्यावा. २ मीटर उंचीच्या मांडवावरती वेल पसरता येतो. वेलांसाठी सिमेंटचीत तार वापरावेत.
- **पाणी:** पहा पावसाळा. हिवाळा, उन्हाळा उन्हाळा जमिनीचा चढउतारानुसार पाणी द्यावे. लागवडीनंतर ऐने दिवस हंडीभर ८ दिवस पाणी द्यावे.
- **काढणी:** रोपे १८ ते २४ महिन्यांनी झाल्यावर हिवाळ्यात काढणी करावी. ऐनवाने खणून वेली वेगळ्या मुळांची तोडणी करावी. ४-५ मुळे असलेली वेलीची लहानी मुळे जमिनीत लावावी. मुळे सुरुवात लावणी वापरावेत वेली जाते.
- **उत्पादन:** प्रति हेक्टरी १२ ते १५ क्विंटल वाळलेल्या मुळांचे उत्पादन मिळते.
- **उत्पादन खर्च:** लागवड उत्पादन खर्च साधारणपणे १,८००० रुपये असतात आणि साधारणी हेक्टरी रुपये १ लाख नफा मिळतो.
- **औषधी गुणधर्म :** शतावरी मधुर, कडू, किंत असून पित्तनाश करते. वातदोष कमी करते. तसेच शारीरिकदृष्ट्या अशक्तपणा, नैराश्य, मूत्ररोग, मूळ न लागणे, मानसिक ताण या विकारांसाठी उपयुक्त आहे. शतावरीच तेल/चूर्णाचा तेल शरीरावर अभ्यंगासाठी, लघवी, मूत्रत्व या वातविकारांवर अत्यंत गुणकारी.
- **बाजारभाव :** ३० ते ३५ प्रती किलो. **निघणारी मुदत :** दिड वर्ष

४) पाषाणभेद

ही वनस्पती पान ओलसरपणी दिसते. तिला पाचपुर असेही म्हणतात. तिला आम्रवेल रंगाची फुले येतात. या वनस्पतीला अनेकांचे वरचा मान आला आहे.

- **उपयोगी भाग:** मूळ
- **जमीन :** मुरमाड़ीत, पाण्याचा निचरा होण्यासंती आवश्यक.
- **लागवड :** १.५ फुटावर, कंदाचा तुकडा करावी. पावसी लागवड बियांपासून किंवा वनस्पतीपासूनही होते. हजारी ३० हजार कंदाचा लागतात.
- **खते :** कंदाच्या सुरुवातीला शेत नांगरून खत गादीचा शेणखत टाकावे.
- **आंतरमशागत :** वेल तणमुक्त ठेवावे.
- **पाणी :** लागवडीनंतर लवचा पाणी द्यावे. वेलिते दोन आठवडे पाऊस न आल्यास प्रत्येक दर-चार दिवसाने पाणी द्यावे अशि नंतर थंड दिवसांनी पाणी द्यावे.
- **काढणी :** लागवडीनंतर चार-सहा महिन्यांनी पीक मुळासकट उपटावे. नंतर वेगळेकरून मुळे कंदापासून तुकडे करावेत. सावलीत वाळवावेत.
- **उत्पादन :** हजारी ६०० ते ७०० किलो मुळाचा मिळतात.
- **उत्पादन खर्च :** हजारी साधारणपणी २३५०० खर्च येतो.
- **औषधी गुणधर्म :** उग्र रसाचा, दस्त, छुटपरीत, इलायी विकारांवर गुणकारी. तसेच व्रण कमी करण्यासाठीही उपयुक्त असते.
- **निघणी मुदत :** ८ महिने.
- **बाजारभाव :** ४५ ते ५० रुपये प्रती किलो.

५) गुळवेल

गुळवेल ही सर्वांना परिचित असलेली बहुवर्षीय वेली आहे. त्याची पाने हृदयाच्या आकाराची असून देठ लांब असतात. खोडापासून वायव्यारुपी अनेक लांबलांब मुळे फुटतात. फुलांचे गुच्छ पेशात त्याचा रंग पिवळट असतो. पक्के गोल, लाल, किंवा रंगाची असून नोव्हेंबर जानेवारी महिन्यात पेशात. पिकल्यावर त्याचा रंग लाल होतो. एका कक्षात एकाच बी असते. गुळवेल वर्षभर, ओला पावसाच्या आधारावर चढते.

- **उपयोगी भाग:** खोड, पाने, मुळे
- **जमीन:** कोरगवाही प्रकारच्या जमिनीत पीक घेता येते. पण जास्त, पाणथळीच्याच्या जमिनीत वाढती वाढ होते. सर्वसाधारणपणे पाच ब्रासच्या खोलीची जमीन लागत असते.
- **लागवड:** १ ते २ महिन्यांची रोपे लागवडीसाठी वापरावीत. ६.० / ५० सेंटीमीटर अंतरावर एक रोप लावावे. वेल तर सोयीनुसार आधार द्यावा.
- **खते:** प्रति हेक्टरी १० ते १५ टन शेणखत जमिनीमध्ये मिसळावे.
- **पाणी:** लागवडीनंतर लगेच पाणी द्यावे. १५ ते २५ दिवसांनी पाण्याच्या पाळ्या द्याव्यात.
- **काढणी:** दोन ते अडीच वर्षांनंतर ऑक्टोबर महिन्यात वेलाची काढणी करावी. खोडाचा रंग भुरकट झिरड झाल्यावर किंवा पान सुकल्यावर खोडापासून वेगळी होण्यास सुरुवात होते तेव्हा पीक समजावे. साधारणपणे १५ सेंटीमीटर लांबीचे तुकडे करून सुकवावे. सावलीत वाळवावेत.
- **उत्पादन:** उत्पादन १० ते १५ क्विंटल प्रति हेक्टरी खोडाचे / कांडाचे उत्पादन मिळते. एका वर्षाच्या ओल्या वेलीचे वजन ५ ते ६ किलो असते. प्रत्येक साधारणपणे ५०० ते ६०० पेन किंवा मिळतात.
- **उत्पादन खर्च :** .....
- **औषधी गुणधर्म :** कडू, तुरट असून शामिकांक आहे. मिश्र उपयोग अजवात, कुष्ठ लागण्यासाठी, पटेलिवार, कडावरोग, मूळव्याध, हृदयविकार, ताप, गलगंडी कमलपत्र, दमा, अशक्तपणा, कामला, गिरु, संधिवात या विकारांवर वेला असतो. तसेच खनीज रस गुळविकार व रक्तीय शुद्ध करण्यासाठी वापरतात.
- **बाजारभाव :** .....

दिलासा जनविकास प्रतिष्ठान

फो. नं., मुख्यालय पत्ता, वेळापत्रक: ९४१०००, दूरध्वनी : ०२४७-२४०००८, फैक्स (०२४७) २४८४४१
ईमेल : dilasangce@gmail.com

Presently, a large number of firms are involved in bulk production of herbal medicines in India. As most of these firms do not have their own source of raw materials required for processing, they are dependent on the natural forests. The demand and supply of the ayurvedic crop is unable to meet from the supply of medicinal crops only from forest which lead to these companies involving in promotion of medicinal crop cultivation among farmers. Still very few farmers go for extensive cultivation of ayurvedic crop. The requirement fulfillment is not there. So, as to meet the demand of the companies as well as people demand due to changing habits, there is a huge scope for medicinal crop cultivation which require awareness creation among farmers. This is also important for mitigating the effects due to climate change. The interventions in this field will be a boom for the farmers as well as the industries thus providing a win- win situation for both. It will lead to better income generation for the farmers with assured returns and secured market from the institute's side.

Proposed Strategy / Activity

Promotion of Medicinal Plant cultivation is another component of the Climate Smart Agriculture promotion under the Corporate Social Responsibility (CSR) programme of RBL Bank Ltd which will be implemented in Aurangabad district of Kannad region in Maharashtra. With this strategy Dilasa has implemented medicinal crop cultivation project. Dilasa has implemented medicinal crop cultivation project in this season to encourage farmers for better cultivation practices by its own so that it can built firm base there to carry out better activities related to it in medicinal crop cultivation.


Coleus Plant

Project Area & Map

Our project area is located in Aurangabad

About Kannad Block

Kannad is a Block situated in Aurangabad district in Maharashtra. Placed in rural area of Maharashtra, it is one among the 9 blocks of Aurangabad district. As per the administration records, the block number of Kannad is 184. The block has 211 villages and there are total 59680 families in this Block.

Population of Kannad Block

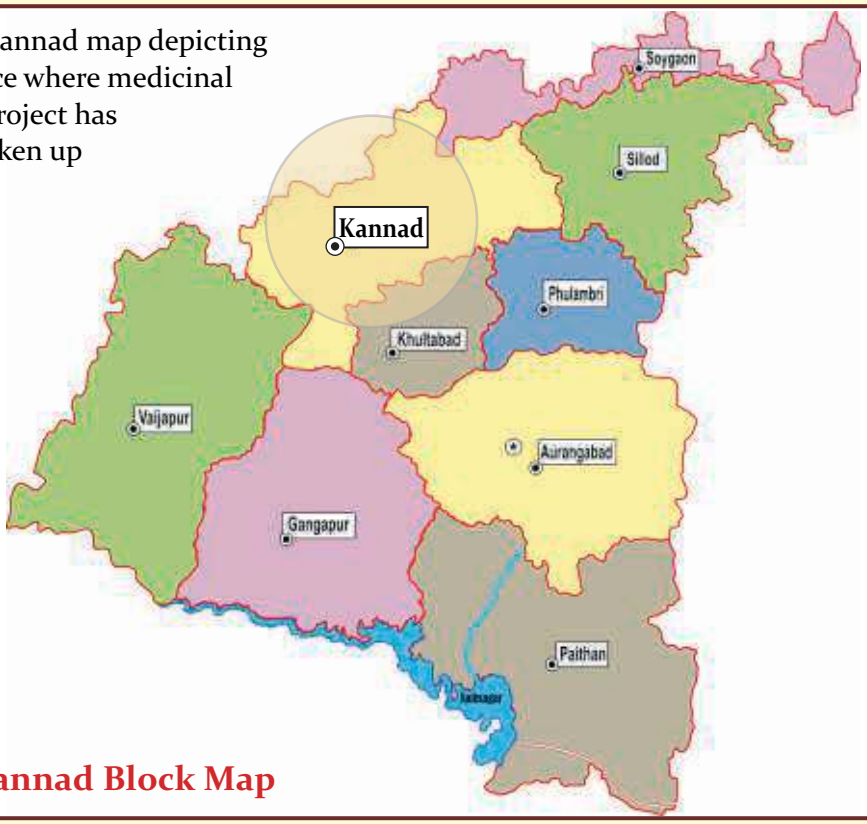
As per Census 2011, Kannad's population is 300260. Out of this, 156496 are males whereas the females count 143764 here. This block has 43700 children in the age group of 0-6 years. Among them 23543 are boys and 20157 are girls.

Agricultural status of Kannad Block

The number of working person of Kannad block is 150744 while 149516 are un-employed. And out of 150744 working people 75132 peoples are completely reliant on farming. The major crops that are being taken up here are cotton, maize, gram, Jowar, wheat, ginger, turmeric and vegetables. They have a good source of irrigation with the availability of suitable soil texture black loamy and sandy loam to support ayurvedic crop interventions in their farms.

Project Area

Map: Kannad map depicting the place where medicinal crops project has been taken up



Kannad Block Map

Village Names

1) Karanjkhed
2) Revulgaon
3) Dhamani
4) Nagapur
5) Nevpur

Phases of the Project

I Phase

- **Capacity building for NGO staff**
- **Preliminary meetings for village selection**
- **Awareness meetings for farmers by NGO staff**
- **Capacity building programme for beneficiary farmers**
- **Purchase of seed materials for nursery estsablishment**

II Phase

- **Nursery establishment for medicinal crops**
- **Exposure visit of beneficiary farmers**
- **Land preparation and transplantation**
- **Intercultural operations in the field** (weeding, hoeing and fertigation)

III Phase

- **Forward market linkage of the produce**
- **Data collection for the analysis of results**

No. of Villages	No. of Beneficiaries	Area covered (acres)
5	274	125

12

Tribal Development Programme (WADI): NABARD supported

The project is being implemented for 1100 tribal families in 12 tribal villages of Igatpuri block of Nashik district and 1000 tribal families in Patur block of Akola district. The main objective is to uplift socio-economic conditions of tribal families through integrated approach. The major components are: Orchard development for 1 acre area, Soil & water conservation measures for 1 acre area, Community health, Women in development activities, Income generation activities for 100 landless tribal families, Peoples organization, First three years is period of wadi establishment in phase manner and remaining 4 years for maintenance of wadi's.

WADI is the holistic project which is implemented from the seedlings to the actual fruit to the plants. It is fullflaged project which gives strength to the Adivasi's. It had given the confidence to the Adivasi families and improves the status of not only land holding families but the landless families were also considered on priority basis.

The implemented various activities in the WADI's are as follows :

- **Wadi** – As a core activity with majority of wadies of 1 acre per tribal family. Keeping in view common fruit crops grown in the Area, recommendations of Krishi Vidyapeeth & villager's inclination, we have planted Mango, and Guava crops in desired proportion of 30:28 in

one acre wadi. Orchard crops Surrounded with Glyricidia, Karvand, Sagargota, tick & Subabhul (50 each) i.e total 300 plants on the borders as forest trees.

- **Soil Conservation:** With the slope of the land less than 5 to 10 %, on an average 100 meters bund with trench will be sufficient to conserve soil & water in the wadi.
- **Water resources Development**- In order to make water available for watering the young fruit saplings in first 2-3 years, all our efforts made to collect the rain water in following ways.
- **Temporary check** dams on the nalas/rivulets at the locations close to the proposed wadis,
- Micro-irrigation units for 500 wadis have been installed for better water management.
- **Sustainable agriculture development**- Introduction of improved varieties of Pulses / oilseed crops as intercrops in-between fruit trees for initial years to get immediate returns to sustain interest of beneficiaries, Demonstration plots of improved crops/varieties are proposed under this intervention. Wadi farmers will be educated for improved agricultural practices.
- **Community development:** capacity of community build up during the project period through different programmes such as trainings, exposure visits, on wadi management, sustainability of wadis, people's organization etc. This will help to ensure active participation of beneficiaries and & Development of skills for management of wadis after project completion, it has been achieved by Promoting participants groups/village planning committees/ cooperative.
- **Women empowerment**- socio-economic development of wadi women through promotion of women SHGs, livelihood activities through IGA, Drudgery Reduction tools, active involvement in peoples organizations. Womens actively involved in wadi programme also.

- **Community Health & sanitation-** primary health care of pregnant women & young, Children, safe drinking water, kitchen gardens, etc. is being carried out during project period.

- **Promotion of micro enterprises** for landless families: 100 landless families from project area

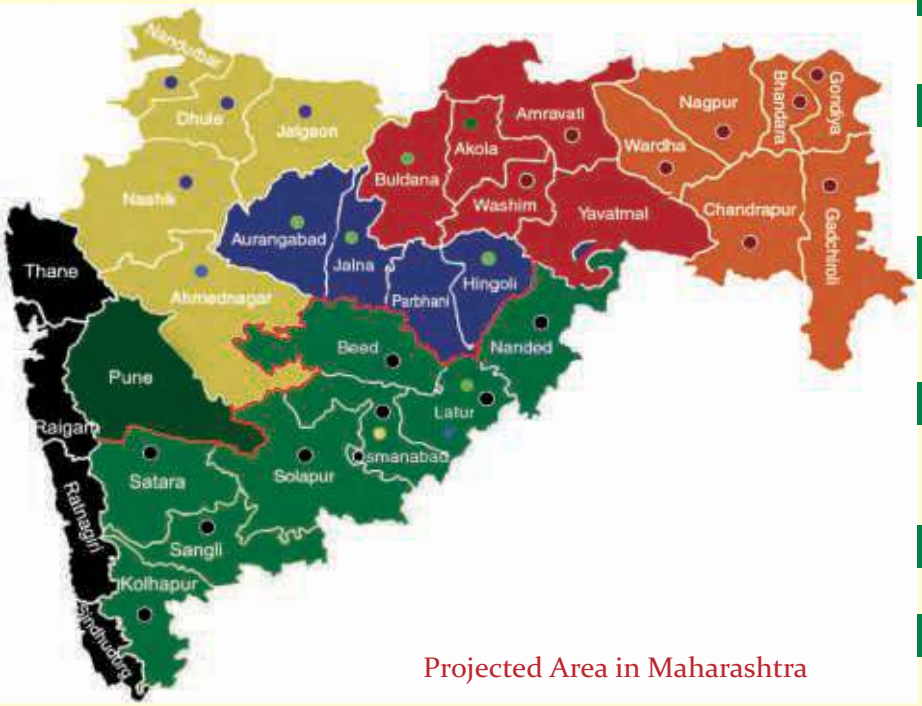
have been identified. These families trained and linked with feasible livelihood activities.

- **Capacity building** of staff & beneficiaries in better management of wadi's, Sustainable agricultural practices, marketing skills, successful running of livelihood activities, development of strong peoples organizations.

13

State Resource Organization (SRO) : Trainings of IWMP Project

Dilasa has been selected as the State Resource Organization (SRO) for the Integrated Watershed Management Programme (IWMP) by Department of Land Resources project and has conducted training programme on the livelihood development in 14 districts of the state and trained more than 1000 participants. Apart from livelihood development Dilasa is also conducting the trainings for Farmers Producer Company, TOT-LRA, Skill Development for LRA, Refresher training livelihood, Community Monitoring and Social Audit



Projected Area in Maharashtra

Farmers Producer Company

Division : Amravati, Nagpur, Aurangabad Latur

TOT - LRA

Division : Thane, Nasik, Pune, Kolhapur, Amravati, Nagpur, Aurangabad, Latur

Skill Development

Division : Thane, Nasik, Pune, Kolhapur, Amravati, Nagpur, Aurangabad, Latur

Livelihood Preparatory Phase

Division : Thane, Nasik, Pune, Kolhapur, Amravati, Nagpur, Aurangabad, Latur

Livelihood Refresher

Division : Aurangabad, Latur

Community Monitoring & Social Audit

Division : Aurangabad

Livelihood Development Training Contents

- Orientation to common guidelines 2011.
- Livelihood Development- Concept and Importance
- Challenges affecting Livelihoods in Rural areas, Ways forward and Livelihood Support Systems
- Income-Generation/ Self-Employment / Entrepreneurship
- Entrepreneurship Development- Concept, Need, Relevance, Importance
- Business Opportunity Search and Scan(BOSS) – Concept and Importance
- Methodology to be used for BOSS (Village Data Sheet, Cluster profile, PRA)
- Exposure visits- PRA for identifying Business opportunities
- Preparation of business Plan/Profiles
- Methodology for preparation of Livelihood Action Plan(LAP) Tables/
- Formats, Exercise on Preparation of LAP for the Cluster
- Markets- Marketing -Marketing Management
- Book Keeping, Accounting, Legal issues, Work ethics& Values,
- Convergence with different schemes
- Exposure Visits-Interviewing Successful entrepreneurs, Failed Ones, discussions with rural institutions for Livelihood development.
- Production enhancement, Value addition in Agriculture Produce, Methodologies & Strategies.

Farmer Producers Company Contents

- Challenges in Agri Business.
- Review of collective approaches, agri business.
- Producer Company Act.
- Process for formulation of PC.
- Roles & Responsibilities of Board of Directors (BoDs), members, CEO, etc.
- Governance and Management of Producer Company (PC).
- Identification, constraints and opportunities of PC.
- Preparation of Road Map for Business Plan for 5 years.
- Avenues of Resource Mobilization for financial sustainability of FPO.

Community Monitoring & Social Audit

- MELD System in IWMP.
- Concept of Participatory MELD.
- Tools & Methods of community monitoring.
- Impact monitoring.
- Process documentation
- Do & Don'ts in Social Audit.

Specialized Skill Development Trainings for LRA

- Fruit & Food Processing.
- Dairy
- Goat Rearing
- Poultry Farming
- Service Sector Enterprise

Training Feedback Tracking System

At the final session of training, we take feedback about training session and training arrangement, through evaluation forms filled by individual participants as well as YASHADA's online feedback process for individual participants to fill on Survey Monkey Database. The purpose of the feedback is to assess how much the trainee has been able to grasp through the training sessions.

Training of Trainers (ToT) on Livelihood for Livelihood Resource Agency (LRA) Content

- Livelihood concept.
- Income generation, self employment, entrepreneurship - difference.
- Enterprise, Entrepreneurs, Entrepreneurship - co-relation.
- Livelihood Action Plan (LAP) Guidelines
- LAP Preparation Methodology
- Institutional Structure in IWMP for implementing livelihood project.
- Business Proposals
- Labeling, Packing & Marketing.
- Training Planning and Methodology Delivery.
- Accounting importance.
- Legal aspects of business management and accounting.

Refresher Training Livelihood

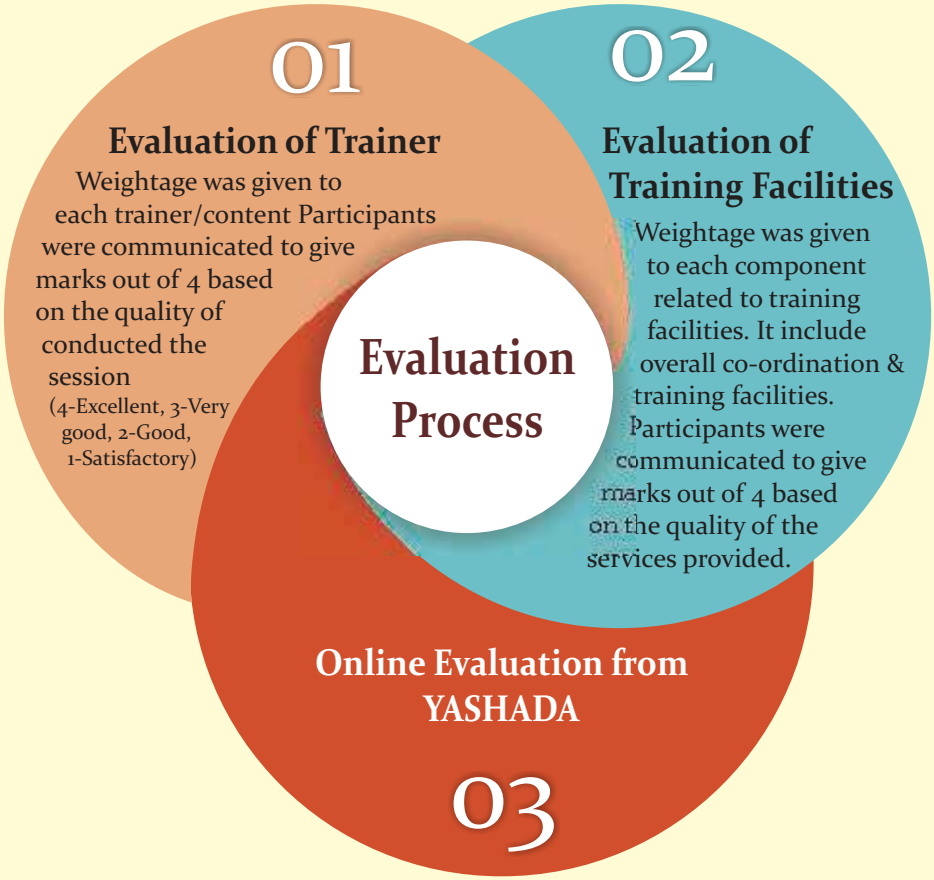
- Procedural aspects, implementation of livelihood action plan. .
- Forward & Backward linkage of any enterprise.
- Value chain development opportunities and strategy, e.g. Animal Husbandry, Agro based activities.
- Convergence opportunities.
- Operationalization of revolving fund.
- Accounting importance.
- Legal aspects.
- Post harvest management.

Cross Learning Visits

Dilasa applies innovative techniques and ideas in capacity building programme. During the training programme, Dilasa arranges subject related exposure visits as well as cross visits related to Integrated Watershed Management Programme. viz. For agriculture stakeholders we arrange cross visits like some successful entrepreneur, SHGs and for livelihood expert and social mobilizer we arrange cross visits like ideal watersheds, successful NRM structures and farmer visits, organic farming, nursery, etc. Because of such visits stakeholder get to clear their ideas regarding IWMP.

Dilasa Published Reading Material

- Way to livelihood in Marathi.
- पाणलोटाची देखभाल (Maintenance of Watershed)
- बचत गट - महिलांचा आधारवड (Self Help Group) : Backbone of Women's development) in Marathi
- शेतकरी गट - कृषी विकासाची गुरूकिल्ली (Farmers Group: key to Agriculture Development in Marathi.
- पाणलोट प्रभावाचे सहभागीय मूल्यावलोकन (Participatory Rural Appraisal of Watershed in Marathi)
- विदर्भातील प्रेरणादायी यशोगाथा : बोरगाव Watershed Success Story of Vidarbha : Borgaon in Marathi
- विदर्भातील प्रेरणादायी यशोगाथा : बोरगाव Watershed Success Story of Vidarbha : Dudhlam in Marathi
- शाश्वत समृद्धीसाठी सोयाबीन Soybean for sustainable prosperity in Marathi.
- Bridging the gap (on drip irrigation)
- कच्चेघाटी : पाणलोट यशोगाथा (Kaccheghati : Watershed Success Story in Marathi)
- आर्थिक साक्षरता (Financial Literacy)
- System of Rice Intensification (SRI) : Climate Smart Agriculture - Booklet.
- Micro Irrigation - Booklet



Achievements (as on 2016-2017)

Sr. No.	Name of Training	Location	Division	No. of Training days	Total Participants
1	Farmer Producer Company	Gurukunj	Nagpur & Amravati	3	25
2	Farmer Producer Company	Gurukunj	Nagpur & Amravati	3	45
3	Farmer Producer Company	Gurukunj	Nagpur & Amravati	3	39
4	Training of Trainer (ToT) on livelihood for LRA	Gurukunj	Nagpur & Amravati	3	28
5	Training of Trainer (ToT) on livelihood for LRA	Gurukunj	Nagpur & Amravati	3	24
	TOTAL			15	161

Feedback

Mr. Ravindra Lokhande, Washim.

Mr. Ravindra Lokhande attended three trainings organized by State Resource Organization (SRO), Dilasa Janvikas Pratisthan, Aurangabad with joint collaboration of YASHADA, PUNE. The first ten days training on livelihood development he attended during 28/04/2014 to 07/05/2014.

Mr. Ravindra Lokhande says – *"Previously it was not clear for us to understand the concept of "User Groups" (UG) in IWMP. The training helped us to understand importance of forming UG. After getting training we have formed UGs in our area as per the guidelines. When objectives behind certain activities get cleared it becomes easy to work on. Training conducted on livelihood, developed our understanding about how livelihood promotion (agriculture based & non agriculture based) is important for developing standard of living of people in watershed area."*

He also attended the training on "Agriculture-management" & "Agriculture- engineering" during 6/12/2014 to 15 /12 / 2014 and 29/12/2016 to 31/12/2016 respectively. The technical information related to various soil & water conservation techniques was the main focal point of the training. The information about natural resource management was also given during the training.

The project in which Mr. Ravindra Lokhande is working, implementation of EPA activities & formation of village level institutions have been done but implementation of NRM work is not started yet. That is why their actual knowledge is not being used. While asking about quality of the training, he says-*"The information given by*

Khadase sir was very easy to understand. He made complicated subject of agri-engineering too simple. When in our area actual implementation of NRM work will be started, we will try our best so that proper implementation of activities can be done." He also added that "Though the organization is conducting the training very effectively, more emphasis should be given on field based learnings & field visits should be added more in numbers".

14

Intervention for Sustainability : Better Cotton Initiative (BCI)

Cotton is a globally important and widely grown crop. It is an industry that employs around 300 million people in the early production stages alone. For millions of people, in some of the world's poorest countries, cotton is a vital and unique link to the global economy.

Cotton is natural, renewable and hugely versatile. It is a key raw material for clothing, beauty products, home furnishings and insulation. It is used by nearly every person on the planet on a daily basis. Unfortunately, its cultivation often puts stress on the planet's natural resources and threatens to undermine the long-term sustainability of the cotton sector. In some areas more attention is needed at the farm level to address inefficient irrigation techniques, poor management practices and improper use of pesticides and fertilizers, which threaten the availability of clean water, soil fertility, human health and biodiversity. Many cotton farmers also suffer from low incomes, a lack of affordable finance, and often have difficulty overcoming the barriers to organising. Farm workers may experience arduous working conditions (particularly women), and in some regions, child labour and forced or bonded labour persist. We can transform the potential of the cotton sector to be a force for positive environmental and social change. Retailers, brands, civil society, producers, governments and suppliers are now coming together to reduce the negative environmental and social consequences of cotton production on a scale never seen before.

Better Cotton (be part of something Better)

Better Cotton came to life out of the belief that we can transform this vital sector.

BCI (Better Cotton Initiative) brings together producers, ginners, mills, traders, manufacturers, retailers, brands and civil society organizations in a unique global community committed to developing Better Cotton as a sustainable Mainstream commodity. By helping farmers to grow cotton in a way that reduces stress on the local environment and improves the livelihoods and welfare of farming communities, BCI aims to create long-term change. It is a global approach that provides a solution for the mainstream cotton industry, including both small holders and large scale farmers.

Benefits are delivered to the poorest and at the same time, large producers are helped to develop solutions that enable large scale provision of a new mainstream commodity, Better Cotton. BCI's approach is to work with members and Implementing partners to enable the supply of Better Cotton and stimulate market demand. Success is measured by both the positive change created at field level and the use of Better Cotton on a global scale. Growing Better Cotton means initially meeting a set of minimum requirements including pesticide use, water conservation, habitat protection, fiber quality and decent work principles.. Once the minimum criteria are met, farmers need to show continuous improvement to remain qualified.

The Better Cotton Initiative (BCI) is a not-for-profit organisation stewarding the global standards for Better Cotton, and bringing together cotton's complex supply chain, from the farmers to the retailers.

"BCI exists to make global cotton production better for the people who produce it, better for the environment it grows in and better for the sector's future, by developing Better Cotton as a sustainable mainstream commodity."

Improve...

livelihoods and economic development in cotton producing areas

Increase...

commitment to and flow of Better Cotton throughout the supply chain

Reduce...

The environmental impact of cotton production

Ensure...

the credibility and sustainability of the Better Cotton Initiative

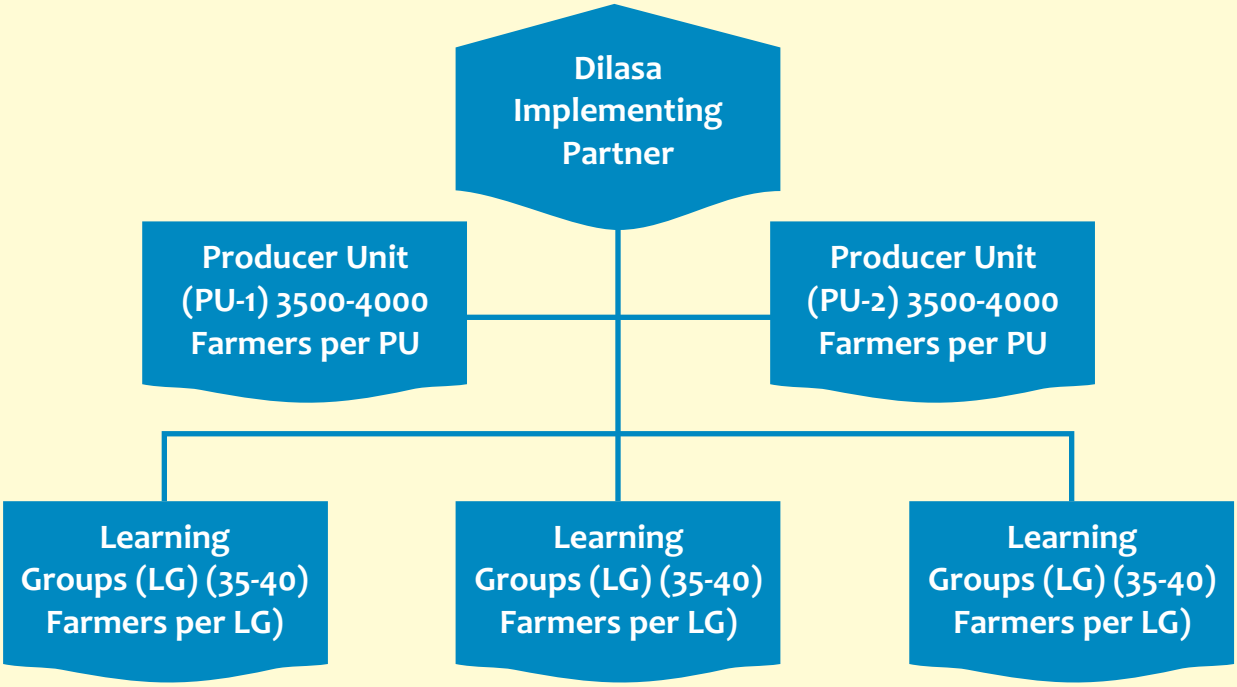
Dilasa's Journey of BCI

Dilasa Janvikas Prathisthan has started to work for cotton from 2010 with sustainable cotton production in 19 villages with 1351 cotton growing farmers from Gangapur & Aurangabad blocks of Aurangabad district. From 2011, these 1351 farmers have been linked with BCI programme and all these farmers achieved minimum requirements of BCI principles for continuous five years of period i.e. up to 2015.

Looking to the success of programme and adoptability of interventions, Dilasa has decided to scale up the programme from 1351 farmers to 7223 farmers in 2015-16 in Phulambri & kannad blocks of Aurangabad, Majalegaon block of Beed district and Pathri block of Parbhani district as indicated in the map below.

Particulars	Aurangabad	Beed	Parbhani	Total
No. of Farmers	4205	2181	1340	7726
No. of LGs	119	63	37	219
Area (ha.)	3597.98	1663.98	2133.7	7395.60
No. of villages	55	14	5	74

Process adopted



Interventions completed

For above principles, Dilasa has worked on capacity building of farmers through different interventions as mentioned below:

Trainings

Three major trainings to cotton growing farmers were being organized at three different critical stages of cotton crop. Following are the training wise details:

First Training

Subject: BCI System, Production principles, INM & Child Labour:

The LG training was completed in the month of may- June before sowing. During these trainings, an LG member has been trained for BCI system, Production principles and MPC's of Soil health and child labour. Under soil health, more emphasis was on integrated Nutrient management as per nutrient status in the area.

The detail schedule of the day has been explained to all participants. First session on developing understanding for BC system was conducted by experts. Training was started with basic for starting BCI project. Why the better cotton is selected- for farmers benefit, for environmental balance and for future benefits & sustainability in cotton cultivation. Farmers are also explained about the benefits of BCI, to whom we called BCI farmer, the production principles including crop protection practices, water management, soil management, natural habitat, fiber quality and decent work minimum production criteria for producing bettor cotton.

How the producer unit is formed. What is the responsibility of farmers in farm assessment? In second presentation he explains the verification process and qualification of BC. It includes farm assessment, what is mean by farm assessment, how it is done and when. What are the responsibilities of farmers, learning group and producer unit in farm assessment. What is mean by credibility check (second party and third party) decision making process on selling Better Cotton, which is the element of supply chain, Data Collection and Data flow, how the data is managed, timeline for BCI.

Second session was conducted on integrated nutrient management. Started with importance of soil testing as well as how the soil sample is collected and methods of testing, nutrient present in soil, their quantity present in soil and its importance. Which are the important elements and their classification? The sources of essential elements (from air, soil and water).as well as the importance of NPK, types of fertilizer including organic, inorganic and bio fertilizer and the methods of fertilizers application. Then he explained the importance of drip irrigation, application of water soluble fertilizer though drips, the soil management practices for maintaining and enhancing the structure and fertility of the soil, as well as use of fertilizer requirement as per the irrigated or rainfed plant population. LG members are enthusiastic while desiccation they ask so many questions like which are the water soluble fertilizer, quantity of water soluble fertilizer (fertilizer through drip), importance of seed treatment why it is done, and procedure for seed treatment.

Third session on Child Labour is being conducted. The definition of child and Legal definition of child in India as well as our definition of labour, Legal definition of Child Labour by ILO. Farmers explained about the term “child labour” its effects such as mentally, physically, socially or morally which are dangerous and harmful to children. Effects of child labour on children, society and on Nation. Which are the rules and provision in Indian law for child labour? At last Group Discussion was done among participants. All the members of LG group were satisfied with the discussion done and thanking us for valuable information. The training session was wrapped up with feedback from all participants.

Second Training:

Subject : Integrated Pest Management (IPM), Health & safety

IPM training was conducted in the month of August. During these training LG Member has been trained for Integrated Pest Management. Now they can identify Insects & Predator which affect the crop development & the chemical use for crop protection which effects adversely on our health.

Topics of Training:

- Integrated Pest Management in cotton cultivation
- Identification of pest and predators
- Pest scouting and decision making
- Health and safety issues during spraying
- Adverse impact of child labour in cotton

1) Integrated Pest Management in cotton cultivation

The role and importance of the integrated pest management

In integrated pest management farmers are being informed for different practices adopted for pest control and use of chemical those are registered nationally and correctly labeled national language not use banned pesticide. Other IPM practices like use first two spraying of neem-ark, in early stage using trap crop like Marigold, sunflower, Cowpea, Non BT etc such trapping crop reduce the attack of pest on main crop. They attract pest and other use Pheroman trap, yellow sticky trap for pest control which helpful for increase the yield.

2) Identification of Pest & Predator

Proper identification of pest and predator is very important and crucial as use and quantity of recommended pesticides depends on it. In this context, farmers are aware about the major pest and predators through pictures. The beneficial and harmful pests are clearly demonstrated during the training. Under this topic, doses and period of pesticide application is also explained. Relevant training materials are also being circulated to each participant.

3) Health & Safety issues during spraying

Person involved in pesticide application should be healthy, trained about spraying, person who is older than 18 years and not pregnant or nursing women present. While spraying, use mask, hand gloves and other safety equipments. Spraying should be conducted in proper weather conditions.

Third Training:

Subject: Water management & post harvest management

The LG training was completed in the month of October when there is need of critical irrigation and

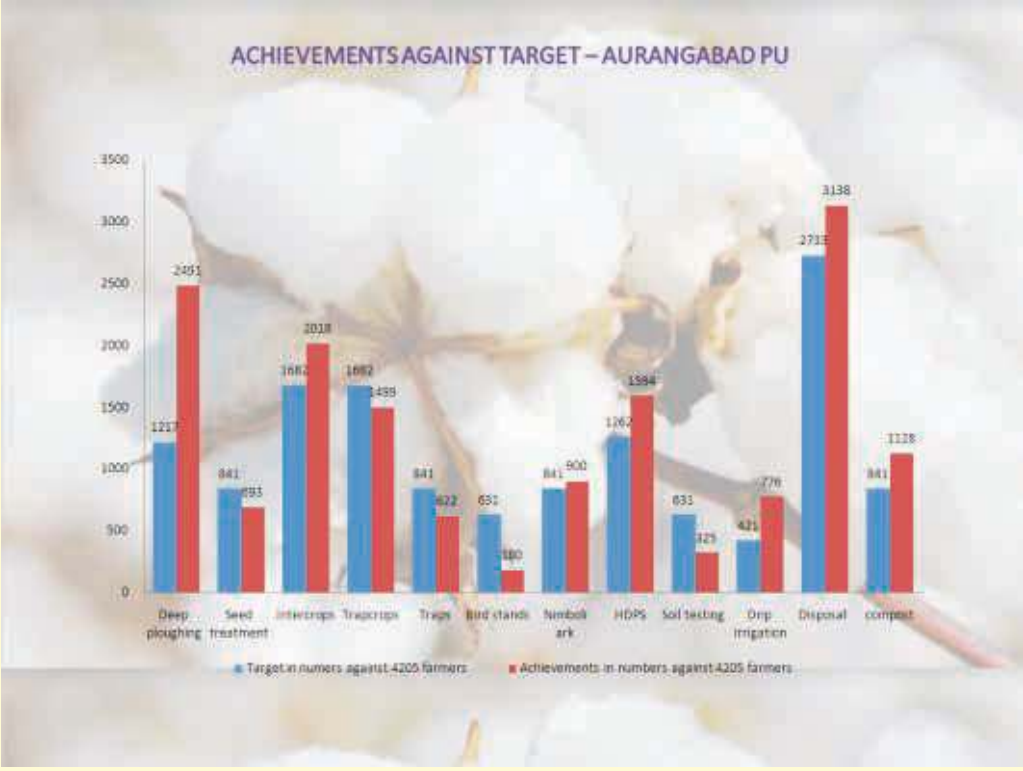
before harvesting of cotton. During these trainings, an LG member has been trained for Water Management & cotton picking. The detail schedule of the day has been explained to all participants. Training was started with basic for starting BCI project. Why the better cotton is selected- for farmers benefit, for environmental balance and for future benefits & sustainability in cotton cultivation. Farmers are explained about the benefits of BCI, to whom we called BCI farmer, the production principles including crop protection, water management & clean cotton picking

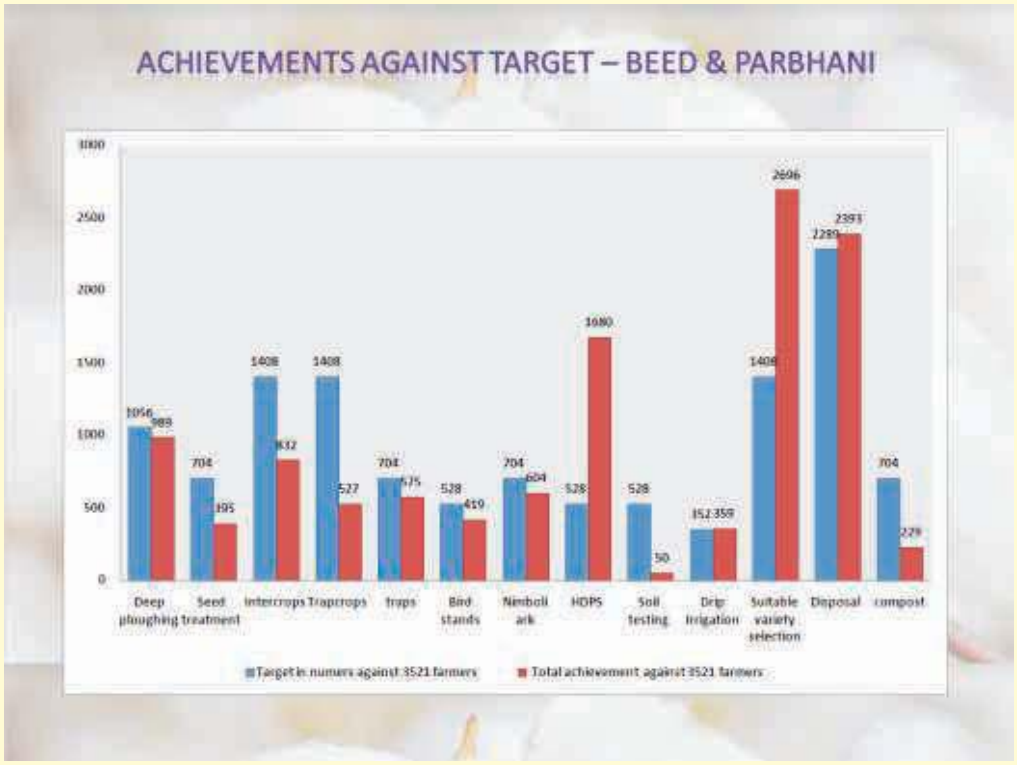
Water is one of the most important inputs essential for the production of crops Water requirement is differ according to crops and soil type Normally a crop has to be irrigated before soil moisture is depleted below 50% of its availability in the root-zone Cotton is a very drought-tolerant plant The cotton plant is drought-adapted and responds favorably to periods of water stress sufficient to slow vegetative growth The water requirement of crops is that quantity of water required by the crops within a given period of time for their maturity Depending on climate and length of the total growing period, cotton needs some 700 to 1300 mm to meet its water requirements (Etm) Evaporation plus the unavoidable losses during the application of water and water required for special operations

Second season is being organized on cotton picking. Farmers explained about how the cotton is being harvested & stored. Only after morning dew drops evaporated, picking should be started. Picking should be done only after at least 50% of the bolls in the field have opened. While picking cotton, laborers should form a line and advance forward together so that they will remain alert and could be well supervised. Start picking from the bottom of the cotton plant to avoid deposition of dry leaf bits on the bolls when the plant shakes. Cotton should be picked from open bolls only. Gather the insect-infested, stained and hard locks as well as locks picked up from the ground in a separate bag, for maintaining purity. Cotton pickers should cover their heads with cloth to prevent cotton being

contaminated with hair. Cotton should be covered with cotton cloth or tarpaulin to avoid soiling of cotton. Tractor trolleys / bullock carts should be cleaned properly before loading of cotton. Trolleys/ bullock carts should be covered from all four sides with cotton cloth or tarpaulin. Storage space for cotton should be clean and dry. If cemented floor is not available, cover the surface with cotton cloth. Cotton heaped in the farm house should be covered with cotton cloth. Cotton pickers should be paid wages on the basis of quality cotton and segregation of different quality cotton. The training session was wrapped up with feedback from all participants and vote of thanks to all resource persons.

Progress : 2016-17





15

Watershed Development Fund (WDF) : Aliyabad Watershed

Aliyabad watershed is located at a distance of 9 km from Naldurg Situated in Tuljapurtaluka and district Osmanabad.This watershed is at 41 km distance from Tuljapur block and about 60 km from Osmanabad. The main attraction of Aliyabad watershed is that this village is situated the national highway road and the watershed is having own natural beauty. It includes about 951.20ha area of Aliyabad and 205.15 ha. area of Ramtirth village.

Afforestration and its impact

When the work of watershed was started the first direct benefit was derived by the poor and unemployed people because they got employment in their own village itself. 114 hectare land is private & gairan land where treatments like CCT, tree plantation.

Farm Land Development and its impact on Crop Cultivation

Along with the treatments in hilly area appropriate treatments were executed on the farm land as well including farm bunding, stone outlets, horticulture plantation, grass seeding, etc. This resulted into increase in ground water table and also reduced soil erosion thereby increasing crop productivity. The farmers were encouraged to take crops like wheat, jawar, soybean, groundnut, tur, ginger, turmeric, mung, onion, tomato, simlachilli, red chili & other vegetable etc. instead of traditional crops like Bajara, Maize, Hybrid Jawar, etc. Because of grass seeding on bunds the availability of fodder also increased.

Before implementation of watershed 600 tones fodder was available during kharif season which is now increased to2353 tones. Because of these farmers could increase their livestock (20 crossbreed cows and 200 buffaloes before

watershed development against 120 crossbreed cows and 260 buffaloes after watershed development).

Drip irrigation & sprinkler irrigation is now practiced on 50 to 75 hectare. With the availability of water now farmers are inclined to do proper planning of water usage and are adopting various modern techniques like drip irrigation, sprinkler, etc.

This is got more production in less area. The annual average income per family in this area has increased up to Rs. 1 lakhs which was Rs.50000 before implementation of watershed. One farmer Mr. Rathod spent only Rs. 3000/- on Varmi composting unit of organic farming in kitchen garden in vegetable for his 0.10 guntas of area. By growing Cucumber, Chilli, Carrot, Onion, Spinach, Methi, Brinjal and Sefa crops he earned Rs.65000 in just 10 R within three months

Horticulture and its impact

Because of increased water availability and improved soil productivity some farmers have taken up horticulture plantation. Under the programme activity horticulture plantation was done on the area of 5ha. Some farmers voluntarily did it on 25 ha. This plantation includes Mango, chiku tamarind, Custard Apple, Amala, etc.

Drainage Line Treatment and its impact

Drainage line treatment includes 9 Loose Boulder Structure, 4 Gabion structure. This has recharged the wells in the vicinity of gabion bund where the water availability up to March.

Social Awareness and its impact

One of the most important requirements of successful watershed development is the active participation of the family in the village. In this programme, the policy of 20% people contribution through shramdan and 80% grant from NABARD was followed. The entire work of watershed treatments was completed by the people. Simultaneously, different programmes were organized by the people who included Mahila Melawa, Group Meetings, etc.

Livelihood Activities

One of the important actions taken by Dilasa is promotion of livelihood activities which was particularly started for landless and marginal farmers. Different livelihood activities in Aliyabad i.e. 2 Kirana shops, 2 Showing machines, 1 carpentry, 3 fisheries, 1 Chilli Cutter, 1 Sewai Machine, 1 Papad Making Machine, 2 Beauty Parlor, 1 Stationary Shop, 1 Readymade Cloth Centre, 1 Motor Rewinding Unit, 10 Dairies, 5 Goat Rearingare functional in this watershed giving livelihood support to the farmers. Training programme on motor rewinding, dairy & goat rearing were organized by Dilasa.

Women Empowerment and its impact

Women empowerment is the need of the time. Every person particularly women, must be literate because then the entire family becomes slowly literate. Education empowers women for the self development. Self Help Group (SHG) is found to be an effective tool for women empowerment. 12 SHGs have been formed in aliyabad with 127women. Their total saving is Rs.189000/-. All the members have inculcated habit of regular saving. All the members have inculcated habit of regular saving. Regular internal lending is going on and four SHGs have already received loan from Bank for Self Enterprise Groups (SEGs). Women have purchased buffaloes and cows and have started dairy activity. They have also formed their own milk collection centre. This success has encouraged women to take up other enterprises.

Convergence

Drainage line treatment i.e. constructed loose boulder structures and earthen nalla bund structures under convergence in this watershed.

At the time of LBS activity, collecting loose boulder by tractor for the construction of structures. This is

the hilly barren land area and do not shows trees in this area so, that looks like desert as well as occur the large amount of soil erosion in this area and after activity photo shows the LBS structure with rising grass, these structure helpful to reduce water runoff and soil erosion.

Earthen nalla bund structure constructed on gut no. 196 and its impact shows the water availability in both structure and its benefit will get to surrounding agriculture. ENB also most effective water harvesting structure likes CNB structure in low cost. This activity constructed across nala for reduce velocity of runoff, increasing water percolation and improving soil moisture.

In nutshell, the overall impact of different interventions and activities executed under comprehensive watershed development of Aliyabad watershed is significant, encouraging and useful for uplifting the environmental, social and economic status of rural people.

Formation of Farmer Produce Company

Dilasa as a PIA has also formed and registered one FPO namely Aliyabad Agro Producer Company in 2016. The objective of forming FPO is to purchase agriculture inputs collectively and marketing of agriculture produces in organized manner. The FPO has been formed and run under the guidance of NABARD produce fund.

आलियाबाद येथे नाबार्डअंतर्गत कार्यालयाचे उद्घाटन

खुदावाडी : तुळजापूर तालुक्यातील आलियाबाद येथे नाबार्ड अंतर्गत ॲग्रो प्रोड्युसर कंपनीचे कार्यालय स्थापन करण्यात आले आहे. या कार्यालयाचे उद्घाटन तुळजापूर पंसचे सभापती प्रकाश चव्हाण यांच्या हस्ते करण्यात आले. यावेळी आलियाबाद शिवारात नाबार्ड, दिलासा संस्थेकडून झालेल्या कामाची पाहणी अधिकाऱ्याकडून करण्यात आली. कार्यक्रमास नाबार्डचे व्यवस्थापक वाय. के. शर्मा, वाय. एन. मवाळ, दिलासा संस्थेच्या ज्योती शिंदे, मुमताज शेख, सरपंच ज्योती चव्हाण, उपसरपंच कांत राठोड, ॲग्रो कंपनीचे प्रर्वतक विलास राठोड, संचालक अमोल चव्हाण, रविकिरण चव्हाण, मनोज चव्हाण, सुभाष नाईक, मनोज राठोड, समाधान पाटील, गुरूदेव राठोड, बाळू कदम, नेमिनाथ चव्हाण, तारू राठोड, शंकर राठोड, भिमाशंकर राठोड, इंदूमती राठोड, रंजना राठोड, राजश्री चव्हाण यांच्यासह शेतकरी, ग्रामस्थ उपस्थित होते.

16

Watershed Development Fund (WDF) : Jalkotwadi Watershed

Jalkotwadi watershed is located at a distance of 9 km from Naldurg Situated in Tuljapur taluka and district Osmanabad. Jalkotwadi watershed is at 41 km distance from Tuljapur block and about 60 km from Osmanabad. The watershed is 1336.28 ha. comprises of only one village. The implementation of the programme of Watershed Development Fund (WDF) has been started from 2011.

During the meeting, discussion with five important topics i.e. Charaibandi, Kurhadbandi, Nashabandi, Community Contribution and Voluntary Shramdan. During Capacity Building Phase activity, actual implementation of watershed development was done on 101 ha. with people participation.

Afforestration and its impact

When the work of watershed was started the first direct benefit was derived by the poor and unemployed people because they got employment in their own village itself. 110 hectare land is private & gairan land where treatments like CCT, tree

plantation. The ridge to valley approach was followed and thereby water flowing from hilly area was arrested through the trenches, water got percolated and wells were thereby recharged. With the tree plantation along the trenches the entire hillock became lush green. The VWC also strictly enforced ban on tree cutting and free grazing. Because of these works the migration to the nearby industrial units and other works also got reduced. It is pertinent to note that for a period of three years employment in their own village was made available with incomes ranging from 0.7 lakh to 1.5 lakh per labour.

Farm Land Development and its impact on crop cultivation

Along with the treatments in hilly area appropriate treatments were executed on the farm land as well including farm bunding, stone outlets, horticulture plantation, grass seeding, etc. This resulted into increase in ground water table and also reduced soil erosion thereby increasing crop productivity. The farmers were encouraged to take crops like wheat, jawar, soybean, groundnut, tur, ginger, turmeric, mung, onion, tomato, simla chilli, red chili & other vegetable etc. instead of traditional crops like Bajara, Maize, Hybrid Jawar, etc. Because of grass seeding on bunds the availability of fodder also increased. Before implementation of watershed 600 tones fodder was available during kharif season which is now increased to 2353 tones. Because of these farmers could increase their livestock (20 crossbreed cows and 200 buffaloes before watershed development against 120 crossbreed cows and 260 buffaloes after watershed development)

Drip irrigation & sprinkler irrigation is now practiced on 50 to 75 hectare. With the availability of water now farmers are inclined to do proper planning of water usage and are adopting various modern techniques like drip irrigation, sprinkler, etc.

This is got more production in less area. The annual average income per family in this area has increased up to Rs. 1 lakhs which was Rs.50000 before implementation of watershed. One progressive farmer Mr. Kadam spent only Rs. 1000/- on local variety of vegetable for his 0.5 acre of area. By growing Cucumber, Chilli, Tomato, Carrot, Onion, Spinach, Methi, Brinjal and Sefa crops he earned Rs.65000 in just 20 R within three months.

Horticulture and its impact

Because of increased water availability and improved soil productivity some farmers have taken up horticulture plantation. Under the programme activity horticulture plantation was done on the area of 5ha. Some farmers voluntarily did it on 25 ha. This plantation includes Mango, Guava, Pomegranate, tamarind, Custard Apple, etc.

Drainage line treatment and its impact

Drainage line treatment includes 9 Loose Boulder Structure, 4 Gabion structure. This has recharged the wells in the vicinity of gabion bund where the water availability up to March.

Social Awareness and its impact

One of the most important requirements of successful watershed development is the active participation of the family in the village. In this programme, the policy of 20% people contribution through shramdan and 80% grant from NABARD was followed. The entire work of watershed treatments was completed by the people. Simultaneously, different programmes were organized by the people who included Mahila Melawa, Group Meetings, etc.

Livelihood Activities

One of the important actions taken by Dilasa is promotion of livelihood activities which was particularly started for landless and marginal farmers. Different livelihood activities in Jalkotwadi- 2 Kirana shop units, 2 Showing machines, 2 carpentry, 3 fishery, 1 Chili Cutter, 1 Sewai Machine, 1 Papad Making Machine, 1 Mandap Decoration, 1 Stationary Shop, 2 Readymade Cloth Centre, 1 Motor Rewinding Unit, 7 Dairies, 5 Goat Rearing, 1 Poultry Unit, 1 Malni Machine are functional in this watershed giving livelihood support to the farmers. Training programme on motor rewinding, dairy & goat rearing were organized by Dilasa

Women Empowerment and its impact

Women empowerment is the need of the time. Every person particularly women, must be literate because then the entire family becomes slowly literate. Education empowers women for the self development. Self Help Group (SHG) is found to be an effective tool for women empowerment. 8 SHGs have been formed in Jalkotwadi with 96 women. Their total saving is Rs.270540/-. All the members have inculcated habit of regular saving. All the members have inculcated habit of regular saving. Regular internal lending is going on and four SHGs have already received loan from Bank for Self Enterprise Groups (SEGs). Women have purchased buffaloes and cows and have started dairy activity. They have also formed their own milk collection centre. This success has encouraged women to take up other enterprises.

Increased ground water level in open Well

Quality of crop is better because of increased soil moisture & package of practice

Horticulture plantation on afforestration area

OVERALL IMPACT

Back yard poultry - Livelihood option within village

Providing Sewing machine for tailoring business under livelihood

Papad making machine under livelihood development

17

Watershed Development Fund (WDF) : Manmodi Watershed

Manmodi watershed is located at a distance of 15 km from Naldurg Situated in Tuljapur taluka and district Osmanabad. This watershed includes Manmodi (Murtha)villages. Manmodi located in the border of Marathwada & western Maharastra and Around 60 km from Osmanabad. This watershed is at 43km distance from Tuljapur block. The total area of Manmodi watershed is 1611.7 ha.

The implementation of the programme of watershed development started from June 2011.

During the meeting, discussion with five important topics i.e. Charaibandi, Kurhadbandi, Nashabandi, Community Contribution and Voluntary Shramdan. During Capacity Building Phase activity, actual implementation of watershed development was done on 101 ha. with people participation.

Afforestration and its impact

When the work of watershed was started the first direct benefit was derived by the poor and unemployed people because they got employment in their own village itself. 175 hectare land is private &gairan land where treatments like, GP EGP CCT, tree plantation.

The ridge to valley approach was followed and thereby water flowing from hilly area was arrested through the trenches, water got percolated and wells were thereby recharged. With the tree plantation along the trenches the entire hillock became lush green. The VWC also strictly enforced ban on tree cutting and free grazing. Because of these works the migration to the nearby industrial units and other works also got reduced. It is pertinent to note that for a period of three years employment in their own village was made available with incomes ranging from 0.7 lakh to 1.5 lakh per labour.

Farm Land Development and its impact on crop cultivation

Along with the treatments in hilly area appropriate treatments were executed on the farm land as well including farm bunding, stone outlets, horticulture plantation, grass seeding, etc. This resulted into increase in ground water table and also reduced soil erosion thereby increasing crop productivity. The farmers were encouraged to take crops like wheat, jawar, soybean, groundnut, tur, ginger, turmeric, mung, onion, tomato, simla chilli, red chili & other vegetable etc. instead of traditional crops like Bajara, Maize, Hybrid Jawar, etc. Because of grass seeding on bunds the availability of fodder also increased. Before implementation of watershed 600 tones fodder was available during kharif season which is now increased to2353 tones. Because of these farmers could increase their livestock (20 crossbreed cows and 200 buffaloes before watershed development against 120 crossbreed cows and 260 buffaloes after watershed development)

Horticulture and its impact

Because of increased water availability and improved soil productivity some farmers have taken up horticulture plantation. Under the programme activity horticulture plantation was done on the area of 14 ha. Some farmers voluntarily did it on 25 ha. This plantation includes Mango, Chiku tamarind, Custard Apple, Amala etc.

Drainage line treatment and its impact

Drainage line treatment includes 4 Gabion structures. This has recharged the wells in the vicinity of gabion bund where the water availability up to March.

Social Awareness and its impact

One of the most important requirements of successful watershed development is the active participation of the family in the village. In this

programme, the policy of 20% people contribution through shramdan and 80% grant from NABARD was followed. The entire work of watershed

treatments was completed by the people. Simultaneously, different programmes were organized by the people who included Mahila Melawa, Group Meetings, etc.

Livelihood Activities

One of the important actions taken by Dilasa is promotion of livelihood activities which was particularly started for landless and marginal farmers. Different livelihood activities in manmodi- 2 Kirana shop units, 2 Showing machines, 2 carpentry, 3 fishery, 1 Chili Cutter, 1 Sewai Machine, 1 Papad Making Machine, 2 Mandapdecoration,1 Stationary Shop, 1 Readymade Cloth Centre, 1 Motor Rewinding Unit, 4 Dairies, 4Goat Rearing, 2cycle mart,1 poultry are functional in this watershed giving livelihood support to the farmers. Training programme on motor rewinding, dairy & goat rearing were organized by Dilasa.

Distribution of Chili Cutting Making Machine

Distribution of Sewing Machine material

Distribution of Mandap Decoration material

Goat Rearing Activity

Women Empowerment and its impact

Women empowerment is the need of the time. Every person particularly women, must be literate because then the entire family becomes slowly literate. Education empowers women for the self development. Self Help Group (SHG) is found to be an effective tool for women empowerment. 12 SHGs have been formed in MANMODI with125women. Their total saving is Rs.28890/-. All the members have inculcated habit of regular saving. All the members have inculcated habit of regular saving. Regular internal lending is going on and one SHGs have already received loan from Bank for Self Enterprise Groups (SEGs). Women have purchased buffaloes and cows and have started dairy activity. They have also formed their own milk collection centre. This success has encouraged women to take up other enterprises.

18

Strengthening SHG movement with NABFINS

Influenced by the women emancipation movement in 80s, Dr Anagha Patil involved actively in the movement. The iconic personalities like Dr Suniti Pungliya, Dr Vidya Bal, Dr Mrunal Gore, Pramila Dandwate, Dr Patil started the work in Marathwada region in atrocities against women. She remained pioneering in conducting first women's morcha in Aurangabad apart from organizing several conferences. She was also involved actively in resolving the family issues as she is also professor in psychology. However, she realized the fact that accusing the male counterpart for the misdeeds will not be useful to involve the women folk in the mainstream of development. She was always worried about the rural women as they are the most exploited section of the society and no efforts were made to involve them in to the mainstream. The traditional women emancipation movement will not be useful and women emancipation movement should propagate the androgyny concept in which men and women should be considered at equal level. Incidentally, this concept was getting the spontaneous response.

Incidentally, the college gave her an opportunity to conduct the National Service Scheme camp in the Mahalpimpri village, which is merely 10 km away from Aurangabad. She had personally witnessed the woes and agony of the women by visiting many villages and put forth the concept of rural emancipation of women in a different manner.

She always propagates the four prolonged programme for the rural women.

She always propagates the four prolonged programme for the rural women.

1) Emancipation from the hazards of drinking water.
2) Emancipation from the hazards of fuel and fodder.
3) Emancipation from the excess agricultural burden.
4) Emancipation from the economic dependence.

It was a coincidence that, the villagers of Mahalpimpri asked Patil madam to form the organization instead of fighting lonely battle. The villagers suggested the name 'Dilasa' and the organization was registered under Charity Act in 1993. In the initial phase, all the programmes were designed to support the four-point programme. For the emancipation of the hazards of the water, as the region lands in the drought-prone area, Dilasa started the first project of Kachcheghati under Indo Germen Watershed Development Project (IGWDP) which is considered as text book of watershed. Dilasa made the history by implementing the watershed projects in four lakh hectares of land and changed the geography by implementing the project with the concept of ridge to valley and considering the aquifer and its management. The strong base of the organization was built on the concept in which women folk, which is 50% of the population were involved not only in the process but the active implementation. The organization had stressed the need of fuel forest for the women and developed grasses by making

each and every bund lush green. The organization received the 'Vanshree' award for the remarkable plantation. It was also seen that, whenever new technology arrives, it is hijacked by the male counterpart and all the drudgery work is loaded on the women. Even as we have not provided the well-equipped sickle to the women, Dr Patil found that, Konkan Agriculture University developed new sickle which was lessening the burden.

The sickle was given to each and every women and developed agro implements bank on the hire basis for them. The organization is still finding the way as to how new technology can be provided to women to lessen her burden. Because, we could not reduce the burden with the development and the only option is to develop their skills and mechanical aptitude. The organization is basically working on the lines of giving the economic independence to the women by different devices. Dilasa developed more than five thousand Self Help Groups (SHG) under different livelihood activities and it is pertinent to note that, most of the SHGs are still active. The NABARD, various nationalized banks, private financial institutions came forward to help the Dilasa SHGs. The organization developed more than twenty women dairies and SHGs received more than five thousand Osmanabadi goats, as an effective device of the livelihood. After the 3500 farmer suicides in Marathwada region for the last four years, Dr Patil as a chief investigator conducted the extensive survey of the suicide families of NABARD in 2015. Most of the suicides occurred due to the deeply ingrained money lending system at the village level and no farmer can fulfill his family livelihood on the agricultural income. There is a strong need of undertaking additional livelihood activities to each family. Incidentally, Dilasa had initiated these activities by making systematic Livelihood Action Plan (LAP) of every village and undertaken the sub-sector study of every cluster.

During 2015-16, Dilasa developed the compact network of SHGs, especially in Kannad, Sillod and Soygaon blocks of the district. Out of 500 valid SHGs, 266 SHGs were linked with ICICI Bank for credit. However, the NabFins, sister concern of NABARD came forward in a big way to help the women. Actually, Nationalised banks are reluctant to give the loans for SHGs. After the stage of maturity with adequate internal lending, there is a need of sustainable financial assistance. The DGM of NabFins, Mr Chalakh, who is looking after Marathwada region, tried to understand the status of the women SHGs. It is very noteworthy that, NabFins gave the financial assistance of One crore Twenty one lakh to the 32 SHGs. These women established dairy by purchasing cows and buffalos. The dairies of Wasdi, Nimbhora and Karanjkhed have transformed the financial status of women. Even as one SHG member purchased Xerox machine and it is going on well. The loan was utilized to develop the beauty parlour, floor mill, sewing machine, developed the shop let of goldsmith and stationery shop. It is noteworthy that, the recovery of NabFins group and ICICI groups is always 100% and that is a special gesture of Dilasa SHGs.

19

Farmer Producer Organization (FPO) under Maharashtra Agriculture Competitiveness Project (MACP)

The Government of Maharashtra through Government of India has credit from the International Development Association (IDA credit no. 4809 IN) for implementation of Maharashtra Agricultural Competitiveness Project (MACP)

The Project Development Objective of the MACP is to increase the productivity, profitability and market access of the farming community in Maharashtra. This would be achieved by providing farmers with technical knowledge, market intelligence and market networks to support diversification and intensification of agriculture production aimed at responding to market demand. Farmers will also be assisted in establishing farmer organizations, developing alternative market channels outside of the regulated markets and in supporting the modernization of promising traditional wholesale markets. The project has three components viz., (i) Intensification and diversification of market led production; (ii) Improving farmer access to markets by promoting alternative markets and modernizing existing APMCs, and (iii) project coordination and management.

Intensification and diversification of market led production

Intensification and diversification of market led production by providing market led agriculture technology transfer to improve productivity and quality production and market information and marketing intelligence, agribusiness opportunities through agribusiness development facility and livestock

Improving Farmer access to markets by promoting alternative markets and modernizing existing APMC

Improving Farmer access to Markets by Promoting alternative Markets and Modernizing existing APMC by promoting alternative marketing systems involving farmers in the formation of producer groups, their associations, developing Farmers Common Service Centre (FCSC), introducing E-Marketing platform with the help of commodity exchanges, by producing warehouse receipt financing to overcome price risk and to provide moderate improvement in Rural Haats, Besides modernization of selected APMCs and Livestock Markets.

Project management: would help to ensure effective project management at the state and district levels, and support information and logistics, communications, project related consultancies and monitoring and evaluation.

About FCSC

This project aims to promote alternative markets for farmers and to link them to emerging agricultural marketing opportunities by organizing them into producer groups and enhancing their competitiveness by supporting group marketing activities. One of the alternative marketing channels that are considered is product aggregation and the sale through producer association. This would be done by organizing the producers into a cluster level Producer Association; develop their capacity and skills for marketing in order to access wider markets; and investment support to these Producer Associations for the establishment of Farmer's Common Service Centre's (FCSC). FCSC's are conceived as small scale aggregation centers owned, managed and operated by Producer Associations.

The project will finance productive demand driven investments on a grant basis to producer association for establishing FCSC and will be available on the basis of business plan prepared by them. The mobilization of producer groups, producer association and establishment of FCSC will be carried out by suitably qualified service providers. These FCSC will undertake various activities such as bulk purchases of inputs for delivery to individual members, marketing of produce, grading and quality control. The benefits of FCSC's are expected to be higher farmer prices through the combination of larger critical masses providing economies of scale, savings in transaction costs and strengthened negotiation positions, coupled with the added value achieved through primary grading and packing.

Under the project, establishment of two types of FCSC would be supported. About 200 FCSC are proposed to be established in primarily cereal and pulse producing areas, and will provide cleaning, grading and packing facilities for cereal and pulse producers another 200 FCSC are proposed to be established in primarily fruits and vegetable producing areas, and will provide cleaning, grading and packing services for fruits and vegetable farmers.

The size and scope of a particular producer association will not be predetermined but will follow a demand led process. Depending on the capacity, maturity and needs these producer associations would be formed. The producer association may be a group based federation of 15-20 producer groups, with each producer group consisting of about 15-20 farmers or a membership based federation consisting of about 300-350 farmers and wherever possible existing commodity groups would be motivated to join the producer association. At critical stages these producer associations will be evaluated on appropriate indicators such as membership attendance; membership strength; record keeping; growth in membership; retention of members; volume and value of marketed quantity to assess the group's maturity.

The producer Groups formation and mobilization activity would be done by separate Service Provider NGOs appointed by PIU (Agri.), MACP, Pune. The time period for this activity is 15 months. After Producer Group Formation and Mobilization mentioned above another service provider SP - Firms (FCSC) for linking Producer Group to forward market linkage would be appointed by PIU Agri. Marketing. This assignment is for subsequent to formations of the community resource person Groups which have been already formed in the area of operation for;

a. Capacity building of community resource person for in FPO book keeping, marketing, transportation.
b. Formation of CRP group of the capable Producer Group,

Objectives

The main objective of this assignment is to capacity building of community resource person in project area to undertake primarily FPO record book keeping. These CRP group would also indulge into various activities such as the work is concerned with training to the community resource person for development of their skill in different sectors like branding of product, marketing, maintaining records as book keeping etc.

Detail objectives are as follows:

- Identification & capacity building of community resource persons
- To help farmers to access various Government entitlements and schemes
- To provide sound technical support and guidance for farmers who take up sustainable agriculture
- To help in documentation of initiatives
- Monitor progress within a community
- To provide valuable feedback to organization
- To Helping branding, promotion, marketing the product in company

About DIVI Socio Techno Consultants

MACP has hired the consultancy services of Divi Socio Techno Consultants(sister concern of DILASA) for linking Producer Groups to forward market linkage and formation of Producer Association and Establishment of Farmer Common Service Centres for (i) Satara(ii) Sangli,(iii) Kolhapur districts and Latur, beed, Osmnabad & Nanded district of marathwada region

Sr. No.	Package No.	Districts	No. of PCs to be developed
1	FCSC Package No. 5	1) Satara	42
		2) Sangli	
		3) Kolhapur	
2	FCSC Package No. 2	1) Latur	56
		2) Beed	
		3) Osmanabad	
		4) Nanded	
3	FCSC Package No. 3	1) Nashik	52
		2) Dhule	
		3) Nandurbar	
		4) Jalgaon	
		Total	150

Project Deliverables

The organisation worked for following deliverables. The key deliverables for the service provider are given below:

Sr. No.	Deliverables
1.	a. Submission of inception report
	b. Assessment of the existing/newly formed producer groups for adopting them for PCs formation.
	c. Training need assessment on market linkages and agribusiness of PGs organized joint training (for market linkage) of PGs with SP NGO
	d. Rally/ meeting of promoter member (all members of PGs in cluster to explain purpose of PCs and way forward)
2.	2.1 a. Initiate process of federating PCs in identified clusters to form PC (identification of BOD and training)
	b. Submission of application for registration of PC and obtain certificate.
	2.2 Facilitation of PCs for collection of share capital and collection of documents for PC registration.
	2.3Training of identified BOD and Advisory board regarding formation of PC legal responsibility- Pros. & cons. Of forming PC – advantages & disadvantages, record keeping, roles & responsibilities of BOD and members, etc.
3.	Identification of business activities and prepare commercial viable and bankable business plan for PCs, including convergence plan, formation of procurement committee.
	3.1 Based on survey report of SP for CIG/FIG and SP of FCSC Identify the business activity and prepare a business plan.
	3.2 Call general meeting and discuss business plan with al share holder and take approval. Male a resolution to approve the BP from general meeting.
	3.3 after approval, BP submit to ATMA and MACP also
4.	Identification and capacity building of community resource person (CRP). Assisting ad facilitating PCs in overall management. Managerial training imparting training, facilitates, execution of BP, Facilitate to execute convergence plan other than MACP.
5.	**Assist PCs for implementation of BP and oversight for operation and management**
6.	Assist the producer associations (PCs) to develop and strengthen the linkages for marketing with other stakeholders, Hand Holding support and oversight for operation and management of BPs (with documentary evidence of establishment of PCs)
7.	Selection for formed PCs (20%) for stage 2 activity, revise the BPS as per the changes, implementation of stage 2 activities.
8.	Hand Holding support and oversight for operation and management of BPs (with documentary evidence of successful and sustainable PCs). Final reports on achievements regarding developing commercially viable, successful FCSCs by documenting the entire activities and resulting thereof.

Balance Sheet

- Funds Liabilities
- Property & Assets

THE BOMBAY PUBLIC TRUST ACT 1950.

SCHEDULE IX (VIDE RULE 17(1))

NAME OF THE TRUST : - DILASA JANVIKAS PRATISHTHAN

REGISTRATION NO. :- F- 2458 (AURANGABAD)

BALANCE SHEET AS ON 31.03.2017

Rs. in lackhs

FUNDS & LIABILITIES	SCH.	Rs.		PROPERTY & ASSETS	SCH.	Rs.
TRUST FUND OR CORPUS FUND	A		48.20	FIXED ASSETS	D	293.52
SECURED LOANS	B		962.56	DEPOSITS AND INVESTMENTS	E	834.10
LIABILITIES, PROVISIONS & ADVANCES FOR EXPENSES	C		1,328.13	ADVANCES & OTHER RECEIVABLES	F	1,064.35
INCOME & EXPENDITURE A/C.			66.70	CASH AND BANK BALANCES	G	213.62
Surplus as per Last B/s.		66.53				
Add : Surplus during the year		0.17				
TOTAL			2,405.59	TOTAL		2,405.59

The above Balance Sheet to the Best of our belief contains a true Account of the Funds and Liabilities and Properties and Assets of the Trust

AS PER OUR REPORT EVEN DATED
FOR PRAS AND CO
CHARTERED ACCOUNTANTS
FRN NO. 133606W

FOR DILASA JANVIKAS PRATISHTHAN

TRUSTEES TRUSTEES

Regd.No. MAH/ AGD-47791 AF-2458

PRAS & CO. F. R. No. 133606W Aurangabad CHARTERED ACCOUNTANTS

CA SAURABH R. KULKARNI
PARTNER
MEMBERSHIP NO. 139108

PLACE :- AURANGABAD
DATE :- 28 / 09 /2017

THE BOMBAY PUBLIC TRUST ACT 1950.

SCHEDULE IX (VIDE RULE 17(1))

NAME OF THE TRUST : - DILASA JANVIKAS PRATISHTHAN

REGISTRATION NO. :- F- 2458 (AURANGABAD)

INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDED 31ST MARCH 2017

EXPENDITURE	SCH.	Rs.		INCOME	SCH.	Rs.
TO ESTABLISHMENT EXPENSES	H	50.42		BY INCOME FROM OTHER SOURCES	K	155.06
TO EXPENDITURE ON THE OBJECT OF TRUST	I	907.77		BY BANK INTEREST	L	10.11
TO AUDIT FEES	J	1.01		BY GRANTS	M	744.15
TO DEPRECIATION	D	5.45		By GRANT IN AID	N	55.50
TO EXCESS OF INCOME OVER EXPENDITURE CARRIED TO BALANCE SHEET		0.17				
TOTAL		964.82		TOTAL		964.82

FOR DILASA JANVIKAS PRATISHTHAN

TRUSTEES

TRUSTEES

Regd.No. MAH/ AGD-47/91 AF-2458

AS PER OUR REPORT EVEN DATED
FOR PRAS AND CO
CHARTERED ACCOUNTANTS
FRN NO. 133606W

CA SAURABH R. KULKARNI
PARTNER
MEMBERSHIP NO. 139108

PLACE :- AURANGABAD
DATE :- 28 / 09 /2017
















Dilasa Janvikas Pratishthan

B-3, Sudarshan Park, Vedant Nagar, Near MIDC Regional Office, Aurangabad -431005.
Email : dilasango@gmail.com, Website : www.dilasango.org