AFPRO

Action For Food Production

ANNUAL REPORT

2017-18

CONTENTS

AIM

The aim of
the society is development of
weaker sections of the rural community and to
move towards sustainable development, through overall
increase in their knowledge and skills in the areas which
directly affect their standard and quality of life.

MISSION

AFPRO
dedicates itself to its mission of
alleviating rural poverty by promoting and
working through voluntary organizations with a focus on
enabling the marginalized and weaker sections of rural
society to participate in the process of rural development by
strengthening their resource base and capabilities through
improved knowledge and skills, both in the technical and
socio - economic development areas.

VISION

AFPRO as a secular
socio - technical development organization
with Christian inspiration visualizes itself as working to
enable the rural poor - including women and men
belonging to small and marginal farmers and the landless,
dalits, tribal people, fisher folk and unemployed youth - to
move towards sustainable development, through an overall
increase in their knowledge and skills in areas that directly affect
their standard and quality of life. It visualizes itself as an
organization that over the next decade will enable the
marginalized rural groups to achieve enhanced socio
- economic and personal status in the society through
appropriate technologies for the management of
natural resources.

Sharing agro-advisory through ICT

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Our Development Partners

- Bajaj Auto LTD
- Bharat Aluminium Company Ltd (BALCO)
- Better Cotton Initiatives (BCI)
- Coca Cola India
- EdelGive Foundation
- HDFC Bank Ltd
- IDH Sustainable Trade Initiative
- IKEA Supply AG
- Lutheran World Relief
- L & T Financial Services
- Mondelez India Foods Pvt. Ltd
- Monsanto India Ltd
- Mahyco Monsanto Biotech (India) Private Limited (MMBL)
- NABARD
- United Way of Mumbai
- Voltas Ltd
- Odisha Power Generation Corporation Ltd
- Water Aid
- World Vision India
- Coordination & Network with other NGOs & grass root workers

Partnership with Governments

- Central and State Govt.in convergence with Niti Aayog, Ministries of Rural Development, Agriculture, Drinking water & Sanitation, Water Resources, River Development & Ganga Rejuvenation, Corporate Affairs, Environment, Forest & climate change, Renewable energy and Panchayati Raj.

Women farmers happy with stress tolerant wheat

Message from Executive Director

Empowering rural communities through sustainable livelihood options- a key determinant for achieving SDGs

In recent years, India has witnessed unprecedented farmers' protests and agitation across the regions expressing their distress, anger and assertion in their desperation, be it the escalation of input cost, diminishing return, farm loan or climate induced disasters affecting their livelihoods and life options. Now a days, large scale migration to cities is a common phenomenon from among poor farmers and the semi-literate youth, as agriculture livelihoods are no more attractive and jobs are shrinking in non-agricultural sector as infrastructure and other development activities in rural sector have not been given due diligence whereas urban development is put in a fast mode, harming effective engagement in agriculture. Therefore it is a major concern for the Nation to address their genuine demands and mitigate this agrarian crisis as 66.46% of the Indian population live in rural India and their major livelihood is agriculture and allied activities.

Developing sustainable livelihood options- the way forward

Adopting temporary relief measures like waiving of agricultural loans and providing compensation for the crop losses by the government is regressive in nature and will not solve the agrarian crisis permanently. Agriculture is considered as the single largest employer in the world, providing livelihoods for 40% of today's global population and the small farmers produce 80% of food consumed in a large part of the developing world. Keeping in mind the first two and most important Sustainable Development Goals- "End poverty in all its forms everywhere" (SDG1) and "End hunger, achieve food security and improved nutrition and promote sustainable agriculture" (SDG2), developing sustainable livelihoods by investing in irrigation, soil and water conservation, wasteland regeneration, rainfed farming, protection of natural resources, bringing in the latest scientific knowledge, technology and innovation to improve production, investing in cold chains, ensuring cheap insurance, stronger social safety nets, better agricultural policies and boosting fair institutional credit flows and marketability, skill development and creating more non-farm rural employment are ways to reduce poverty and hunger worldwide.

Water Management

In India, the intensity and frequency of crop failures have increased in recent years due to various factors like erratic rainfall, climate change, faster pest mutation, and decrease in soil health, moisture level and nutrients. Due to diminishing return, the farmers are not willing to take further risk and slowly withdrawing from farming activities for better livelihood options. If this trend continues for a longer period, it will be devastating and will create greater repercussion with regard to food security in India. As water is the main component of agriculture, more emphasis should be given on conservation and efficient use of water as sustainable rural economy revolves around adequate and equitable supply of water for irrigation and other purposes which is akin with SDG 6-"ennsure availability and sustainable management of water and sanitation for all". To achieve this goal, the Government should play a vital role to put in place efficient water management system with a convergence effort of Centre, State, local administrative bodies with community participation, NGOs and CSOs. The participatory approach should be adopted to take all stakeholders into the scheme from planning to the implementation level. Awareness building and training for the farming communities and capacitating the CBOs to transform them into performing institutions is the right path for sustainability. As per article 243G, 11th schedule No.3, the Government should also focus on decentralized watershed management and adopt effective soil fertility measures to improve yield per acre against the backdrop of extreme climate variations. PRIs should be trained and capacitated to deal with the community and work along with them to adopt effective water conservation measures and implement good water management system at the local level.

Absence of efficient sustainable water management can result in water scarcity which can lead to disastrous consequences impacting food production as most of the farming is rain-fed. Improving irrigation system, encouraging drip/ sprinkler/energy efficient irrigation, creating more water storage facilities, adopting Nature Based Solutions (NBS) for conserving all natural water sources, replenishing the aquifers, introducing new technologies, water recharging through watershed development, controlling over extraction of ground water, minimizing water-guzzling crops and

adopting conservation agriculture are some of the measures for creating more water for agriculture. All these measures will result in increased soil moisture, recharge groundwater, besides creating an opportunity to take a second crop by the farmers. Alongside water management, in the light of diminishing agricultural return and agriculture becoming more complex in the milieu of climate change, through training and dissemination of skills and agronomic knowledge, the farmers should be capacitated to adopt new cultivation technics like SRI, using latest technology like App. based information and cajole them to adopt different livelihood strategies and adaptation measures to get better return with limited resources.

Promoting diversification of agriculture and rural non-farm activities.

Another way for sustainable livelihood for the rural community is promoting diversified agriculture and intensifying non- farm activities. Depending on a single crop exposes them to more vulnerability, if their crop fails due to monsoon failure. Therefore diversification of agriculture like taking up horticultural, floricultural crops, animal husbandry and allied activities will enhance their financial security. This will act as a cushion to absorb the shock of crop failure. Creating and developing non-farm activities especially during lean season is another way for supplementing agricultural income. Bringing more infrastructure development in the rural sector is a great means of generating employment and income besides creating asset to the rural community. To bring self-subsistence to the village economy and achieve robust farm growth, more investment and capital formation is needed in the agriculture sector to attain long term goals. All these measures are ways of strengthening rural economy, ensuring stability and sustainability of the community, in the absence of which the rural population will continue to struggle for their survival. The mass farmers' protest and agitations and migration to cities are expressions of their deep rooted frustration and the very denial of their right to live a life of dignity enshrined in the constitution. Agrarian crisis is bound to increase and intensify its impact in future, if comprehensive agricultural policies and sustainable agricultural practices are not adopted to keep the farming community contented and guaranteeing food security in India.

Siya Ram Thakur's Field - SRI Promotion

FOOD SECURITY AND LIVELIHOODS

Better Cotton Initiatives in Cotton (BCI)

Project Title	Better Cotton Initiatives in Cotton(BCI)
Duration	April 2017 - March 2018
Funding Agency	BCI Growth and Innovation Foundation (GIF)
Location	Gujarat (Dhangandhara,Wakaner and Dhoraji dt. & Maharashtra (Yavatmal Dt)
Beneficiaries	39878 farmers in Gujarat and 20139 farmers in Maharashtra

Using of excessive chemical fertilizers and incessant use of pesticides and adopting unscientific cotton harvesting method have lowered the quality of cotton and in many cases failed in meeting international standard for export. Last year cotton growers faced pink bollworm and whitefly attack in larger scale in most of the cotton growing areas. To make cotton farming more sustainable, AFPRO has been extending technical training/capacity building support, coordination and establishing market linkages to small and marginal farmers in Yavatmal (Maharashtra) and Gujarat in collaboration with BCI Growth and Innovation Foundation (GIF). The project is to improve cotton production standard by promoting Better Cotton Systems that would result in a balanced approach to increase farmers' income with sustainability of natural resources. The major component of the program is to train the farmers on the BMP in cotton, to reduce the excessive use of chemicals, improve soil health and water use efficiency and preserving quality of fibre for ensuring substantial return for farmers through institutional strengthening.

Interventions	Impacts
❖ Setting up of 360 demonstration plots in Gujarat and 408 in Maharashtra on HDPS, INM, IPM, mulching, water stress, pink boll worm, white fly control etc.	❖ 100% compliance with 3 year license in Gujarat and 1 year license in Maharashtra for growing cotton. Demonstration plots give the framers direct knowledge and field experience, helped in cross learning & adaptation of better practices.
❖ In Gujarat total 1582 of soil samples and 342 water samples were tested and in Maharashtra 500 soil samples were tested. Sample reports distributed to farmers with guidance on recommendations.	❖ Soil management practices improved the crop growth. Farmers use appropriate chemical fertilizers after soil testing.
❖ Modular training of LG on major topic like- BCS concepts, principles and criteria, pre-sowing operations, INM,IPM, fibre quality, decent work and harvesting methods.	❖ 15-16% deduction in production cost, 20-25 % reduction in the use of chemicals, quality of cotton improved. Net profit recorded Rs.40,000 to 50,000/ha. Attitudinal change towards farm labour and labour safety and their facilities and sensitization towards child labour- all due to adoption of Scientific BCS principles.
❖ 20 and 136 special women training organized in Gujarat and Maharashtra respectively on women empowerment, health and safety measures, child labour, sanitation and side effects of pesticide and bottles. Total of 5270 women participated. Child rally conducted on child labour issues, awareness about Monocrotophos, health and safety measures, sanitation. Total of 190 rallies conducted in 188 villages	❖ Women are more empowered and well aware of health hazards associated with pesticides application and how to protect them from these maladies. No accidental death reported due to pesticide handling in the project area whereas in other areas such deaths reported this year
❖ 13 PU wise training on pink bollworm management supply chain linkages for farmers. 674 farmers participated.	❖ Farmers are able to control the pink bollworm attack in a better way especially using new technics like waste decomposer
❖ Training on IPM, INM, IDM & WM farmers' field book, decent work, BCI technical training, pink bollworm /white fly management organized for PU Manager & Project managers at various locations	❖ Better practices adopted among farmers through updated knowledge, continuous training and monitoring and coordination
❖ Development & distribution of IEC materials - like IPM Chart, INM chart, banners of principles & criteria, health & safety	❖ Understanding and assimilation of various components made easy for the farmers. Monitoring on nutrient and pest helps in regulating the fertilizer and pesticides applications.

measures, FFB, training registers were prepared in local language & disseminated among FF & farming community along with regular monitoring.	
❖ Use of ICT: Project collaborated with KVK, Krayons, Reliance Foundation and other organizations for providing SMS services towards crop advisories for Lead farmers, progressive farmers, core team and FFs. About 12897 farmers were covered under this programme. 27000 farmers were enrolled for ICT based SMS service which provides information to farmers on weather alerts, weather based crop advisories, market price etc.	❖ Farmers get the latest crop specific information, crop advisories, weather forecast and other relevant information in their devise, making them alert and helping them to take quick action for their crop protection and management
❖ Composting: 250 Demonstration on composting conducted using cow dung to enrich soil with microbes.	❖ Organic compost produced without much expense and used in the field regularly as a soil nutrient, thereby improving crop production

Demo Plot - Dhangandhra, Gujarat

Sustainability & Challenges

Natural resources are not unlimited, at the same time the population which is exploding depends deeply on the resources available for their food security and livelihood. In the light of climate change impact, the situation is far more critical. Therefore it is necessary to take serious step to protect and augment the limited natural resources especially water and soil which is directly connected with food production. Capacitating the farming community and convincing them about the importance of controlled use of water and improving the soil fertility is the key to promote sustainable agriculture. AFPRO has been actively involved in imparting technical knowledge and skill to the cotton farmers through training and capacity building on various topics like INM, IPM, mulching, water stress, soil testing, setting up demo plots, promotion of new technics like waste decomposer, the controlled use of chemical fertilizers and pesticides and promoting bio-fertilizers and nature based pest control methods and organic manure for improving soil health and nutrient. However the challenge is convincing the famers to use micro nutrients and reducing the application of chemical fertilizers as they want immediate gratification that has perverted the society today. It is like killing the golden goose which is suicidal in the long run.

Field training of Team by Expert - HDPS Demo

Children's rally against pink bollworm

AFPRO
Action For Food Production

Mobilizing farmers towards eco-friendly and low cost methods of quality cumin Cultivation

Forging strategic partnership with IDH-Sustainable Trade initiative:

In partnership with IDH-Sustainable Trade Initiative, AFPRO has been working with cumin cultivators for the past two years to improve their production and raise their quality by introducing scientific approach with modern technologies to make cumin cultivation a sustainable livelihood option for the marginal cumin cultivators. This species has a great potential for commercial cultivation as it is used for various purposes. It is one of the most important medicinal plants and one of the non-oil items for export.

Project Title	Promoting Intensive Cumin cultivation among cotton growing areas
Duration	October 2017 - March 2018
Funding Agency	IDH Sustainable Trade Initiative, Netherland
Location	Dhrangadhra & Dasada block, Surendranagar Dt. Gujarat
Coverage	5022 farmers in 42 villages,10385 ha

Coverage and Approach

Considering the importance of biological application of fertilizers with sustainable agricultural production in order to eliminate or reduce chemical input to achieve desirable and sustainable quality, AFPRO has been giving handholding support and disseminating information to famers to produce the best quality seeds to generate better revenue. The focused activity was capacitating the community through promotion of situation specific soil, water, pest & disease management.

Interventions	Impacts
❖ Formation of 158 Sustainable Agricultural Groups (SAG) each consisting of 30-35 members. ❖ 40 numbers of demo plot@ 01 plot of 1.0 acre agricultural irrigated land in each village. Inputs like bio-fertiliser, bio-pesticide, organic manure, sticky trap are provided to the demo farmers. 700 yellow trap and 955 trapcrop demonstrated; 200 soil sample tested; 42 lead farmers trained on sustainable spice cultivation, insects monitoring and organic farming; 5022 farmers received technical training. **Health issues, compost units bio pesticides and grading** ❖ 200 health and safety kits distributed among labourers, 40 compost units made and one each bio-pesticides unit started in each village to enrich FYM, grading done as A,B,C for farmers based on the criteria of IPM approach with MRL. ❖ The IEC material prepared on sustainable cumin, Farmers Field Book, Leaflets, RIR formats etc printed in local language and distributed to farmers (15000).	❖ 30% reduction in cost of cultivation ❖ Sustainable practices and mutual support and learning developed among group members. ❖ provided better supply chain support by effective liaison with the cumin procurement and processing groups at the local Level ❖ 35 % reduction in use of chemicals (fertilizer and chemical pesticide) is recorded. Reduction in water usage and increased moisture management. Farmers started appropriate use of chemical fertilizer after soil testing ❖ Cumin growing farmers learnt the best package and practices. Farmers now understand MRL based cumin production. ❖ Farmers attitude now changed towards use of bio-pesticide, organic inputs and safety measures ❖ More than 30% farmers covered under ICT based activities and they get good information on fertilizer and pesticides management.

Beneficial insect monitoring

Demo plot - Raised bed cumin field

Adopting sustainable Approach to improve quality and Production of Grapes in India

AFPRO with the support from IDH has launched this initiative in Nashik and Sangli districts of Maharashtra State in July 2016 which is inspired by the mandate of SIFAV2020. We had extended technical support to small and marginal grape farmers to improve the quality of grapes with the aim of sustained scientific viticulture with increase in quality grape production for the global consumers by adopting Good and Sustainable Agricultural Practices (SAP). The main component of the programme is capacity building and dissemination of scientific knowledge and adopting environment friendly approaches to improve quality of grapes and increase the profit margin.

The first Phase of the project began with the technical capacity building of the project staff and registration of 5000 grape farmers with geo-tagging of their grape plots. Engagement with farmers by developing a good rapport and familiarizing them with the project objectives was the prime task and challenge as well. The credible and honest inputs provided under the phase which aimed at good future of grape supply chain raised the expectations of the farmers. In its second stage, along with the experiences, learnings and expectations from the previous period, farmers realized the significance of sustainable practices over the market led cost-intensive & unfriendly (from health & environment point of view) measures. In this phase, they actually started adopting the sustainable practices recommended under the project.

Project Title	Sustainable Grape Initiatives (SGI)
Duration	July 2017 - June 2018
Funding Agency	IDH Sustainable Trade Initiative-Netherland
Location	Nashik and Sangli districts in Maharashtra
Coverage	5250 small and medium farmers and 750 large farmers

Project Cycle

Training in good viticulture practices

ACHIEVEMENTS

- 5901 Farmers registered
- 312 Small Group Meetings covering both farmers & farm labourers (including women) were organized
- 61 Village Level and 10 Cluster level trainings were conducted on viticulture practices imparting scientific knowlegde & its challenges
- 31 demonstration plots set up in 30 villages using non - chemical method to control pest and enhance soil nutrition
- 176 field visits were conducted by SGI Grape experts
- 3 no. Staff training were conducted on technical aspects, viticulture, social/ethical compliance and gender sensitization
- IEC materials were distributed on insect/pest control by non chemical methods, viticulture management & preparation of organic manure

MAJOR OUTCOME

- The project developed farmers' knowledge base and also their inclination towards adoption of sustainable grape practices.
- The project has been a trend setter for all practitioners with regard to 'Sustainability Approach', scientific perspective development instead of just providing chemical remedies.
- Experts and companies now started involving women and taking the sustainability approach in their training sessions and seminars.

Approach to Sustainable livelihood Security through water resource management with community participation

Project Title	Enhancing Small Holder Farmers Resilience
Duration	January 2015 - December 2017
Funding Agency	Lutheran World Relief (LWR)
Location	4 gram Panchayats i.e. Baijalpur, Lailakh, Pharaka & Parghari at Sabaur block of Bhagalpur District, Bihar
Coverage	5000 farmers

Sabour Block, situated in the southern bank of river Ganges, is among the low lying areas of flood plain in Bhagalpur, Bihar. The project villages experienced recurrent inundation and flood ravages during monsoon coupled with unavailability of water during winter resulting in crop failure in both Kharif and Rabi season adversely affecting the income and life of the marginalized farmers in the area.

LWR supported three years long project was winded up successfully in 2017 by conducting a 'Policy Dialogue' with all the stakeholders including Policy Makers and Institutions of higher learning in agriculture/water sector. The objective was to understand the way forward for Sustainability of Water Supply, Demand Management & Water Budgeting and make a road map for region for replication. As an outcome of this 'Policy Dialogue' a 3 day "Training Programme" was conducted by Regional Central Ground Water Board, Patna for knowledge and skill development of the farmers. The project was appreciated by Senior Scientist of National Remote Sensing Centre, Hyderabad to make the villages resilient towards unseasonal drought.

Sustainability Approach

Adopting new method of cultivation and introducing new varieties of seeds/crops to overcome the recurrent annual phenomenon of drought and flood was the best option for developing sustainable livelihood for these subsistence farmers. The sustainability of the project component was ensured by formation of community groups & capacitating them for water management, regular monitoring of GWL through piezo wells. Also, they are linked with external agencies for further support and guidance. Scientific knowledge and information on agriculture is imparted through mobile app and other modern communication technics. The project has altered the mindset of the farming community with more sustainable and resilient practices and controlling the use of available natural resources, especially water resource and its optimum usage.

Major Achievements

- Promoted flood resistant Swarna Sub1 and heat resistant Sabour Ardh Jal for paddy and H-1 1563 and HD 2967 for wheat.
- 476 NADEP Compost Pits constructed promoting usage of organic manure. Hence, reducing cost of buying chemical fertilizers and improving the soil health.
- 50 bore well with submersible pumps installed benefitting 504 families. Each bore well gives irrigation for approx. 15 acres with an average discharge of 2000 LPH to 22000 LPH.
- 3 piezo wells were installed for regular monitoring fluctuation of ground water level.
- Training conducted on Water use efficiency and water budgeting by Regional Central Ground Water Board.
- 166 women farmers groups have been formed
- Agro Advisories were given to 5000 farmers through disseminating SMSs. It provided information on crop growth stage and nutrient-pest-water-disease-soil health management to mitigate risks & reduce losses.
- 166 rocking sprayers & 320 dry land weeders were distributed to farmer groups.
- 1000 BAU Bihar Kissan Diary was distributed to villagers to keep updated with latest agricultural techniques.

Bore well testing

Combating Climate Change with mitigation Measures & Adaptive Approaches for sustainable agriculture

BALCO in partnership with AFPRO is continuously contributing towards social development of communities of the surrounding villages of its operating plants through different projects. 'Jalgram Pariyojna' was implemented to develop water resources of the villages and to encourage the development of integrated livelihood models based on System of Rice Intensification (SRI), Vegetable cultivation, fish rearing and micro-enterprise development. Taking forward the learning of the project to another level, the project on "Climate Resilient Development" was formulated.

Considering the vulnerabilities of climate change on different facets of livelihoods of the community, Jalgram Pariyojna project was taken to next level in the said project in which more intense work was done to enhance groundwater status of the villages. The project was initiated in Jan 2017 with the aim to reduce the vulnerability of approximately 363 families to climate change through adaptive capacity building. The project was framed keeping in mind several challenges like lack of irrigation facilities, lack of knowledge and awareness about improved agriculture practices, less price realization, failure of crops due to frequent extreme weather events. With Integrated approaches to inclusive, sustainable, and climate resilient growth and development, NABARD joined hands under the project. Implementation strategies were shaped after understanding of local issues, systematic analysis of changes in climate, need assessment and joint reconnaissance survey etc.

Project Title	**Climate Change Accelerated land-Water bio-diversity degradation and Mitigation Measures & Adaptive Approach for Enhanced Agricultural Production**
Duration	Jan 2017 - Dec 2020
Funding Agency	BALCO - NABARD
Location	Four villages of Korba Block of Korba District, Chhattisgarh.
Coverage	363 families covering 250 acres of land

Interventions	Outcomes
Improved Agricultural Practices	
Soil health cards issued to 110 families covering 70 acres of land.	Growth- yield increased by 30%.
111 acres additional land brought under second crop cultivation by promoting SRI & SWI practices benefitting 101 families	Rice production increased 1.5 times the normal value, SRI- 25 qn/acre and SWI- 16qn/acre. Additional Rs.33000 per acre generated through wheat cultivation. FPOs created for awareness & sustainability
25 families covering 20 acres of land adopted multi cropping	Soil fertility increased due to proper cropping cycle. Per acre income increased from Rs. 30000 to Rs. 96000/ Acre
45 farmers covering 54 acres of land beniffted by providing irrigation facilities.	Additional 25 acres of land brought under cultivation. Enhanced production by 20%. Reduction in water use to 40% due to micro irrigation systems.
Livestock Promotion	
20000 Fish seeds distributed among 50 families along with training	Income increased @ Rs. 14000/farmer.
Water Augmentation	
Two new check dams constructed generating 5820 cum water benefitting 55 families	1.40 Acres additional land brought under cultivation. Yield increased by 30% due to adequate water availability.
VDC is formed for post construction operation & management towards sustainability.	Awareness created for the proper & optimum use of the water from structures as per the need of the crops
One irrigation well dug, bringing additional 88cum water for cultivation for 10 families.	1.4 Acres brought under vegetable cultivation. Drinking water solution for 10 families. Income generated @ Rs. 20000/family through vegetable cultivation.

One farm pond (5 % model) created storing 776 cum water benefitting 4 families bringing 1.5 acre additional land under cultivation	Additional income generation through Fishery by Rs.10000/family Vegetable cultivation introduced in 2 acres.
Energy & Environment	
4 solar pumps distributed among six families.	Safe 24 hours electric supply for irrigation and also reducing electricity bill. Yield increased by 30% due to timely irrigation

Fish farming - Sonpuri village

Fertilizer support for SRI Cultivation - Bela village

Women engaged in vegetable cultivation

Sustainability Approach

Access to critical irrigation for both Kharif and Rabi crop is the main stay for sustainable agriculture. If sufficient water is available, agricultural activities can be diversified bringing more income to the farmers. Therefore the project approach was to augment the available water resources and adopt various technics to improve water use efficiency and promote improved agricultural practices for optimizing production. The community was actively involved through the formulation to the implementation process. Strengthening the communities through dissemination of information on effective agricultural practices and convincing them about the vulnerability of climate change effect and taking mitigation measures has taken precedence. Formation of VDCs for water management and post construction operations and maintenance and empowering the farmers through Farmers' Producer Organization (FPO) were other steps taken towards sustainability.

Improving livelihoods through development of Water Resources

Chhattisgarh is one among the few states of India, which has vast natural resources. Proper and planned exploitation of the untapped resources can change the present scenario of this state, which is also known as “Poor People's Rich Land”. Agriculture is the main occupation of the people and the foundation of the economy. The norm is single crop and rain-fed agriculture, with paddy as the main kharif crop, in about 80 percent of the net sown area. Due to vagary of monsoon, ensuring protective/secured irrigation for this single rain-fed crop is a quite difficult proposition from farmers' perspective due to dry spell of monsoon season. Initiation of Rabi cropping is also a challenging situation for the farmers due to water unavailability. All these adverse conditions are directly affecting the livelihoods of the rural communities in the farm sector interventions. In this context, AFPRO and EdelGive Foundation came together to develop water conservation structures/measures and devise strategies for management of water resources and introduce improved agricultural practices. A variety of activities were executed to enhance the capacity of water bodies together with improved agricultural practices during Kharif & Rabi season leading to enhanced income level & overall quality of life.

Project Title	Promotion of Rural Livelihoods through farm sector interventions by water conservation measures/structures for a cluster of 4 Project Villages
Duration	January 2016 - December 2019
Funding Agency	EdelGive Foundation
Location	Tengna Barpara, Kosmi, Nahanda and Kapermeta villages of Gurur block of Balood district, Chhattisgarh
Coverage	267 farmers are targeted comprising of 220.5 acres.

Interventions	Outcomes
Introduced SRI Technique –covering 9 farmers & 6 acres	Production of paddy increased up to 3 to 4 Quintals per acre as compared to traditional method. After seeing the results in increased production, more farmers are taking interest for SRI Technique in the upcoming Kharif season.
Under Rabi crop Diversification -39 farmers & 33.50 acres covered	Earlier, the maximum production of wheat was 6 Quintal/ acre in the last Rabi season but production of wheat reached up to 10 Quintal/ acre in this season. Crop rotation helps in increasing land fertility and also less water consumption.
Promoted Horticulture benefitting 16 farmers covering 5.30 acres	Farmers take more interest to cultivate vegetables than wheat during the Rabi season. By adopting new method, farmers are getting enhanced yield & income.
3 community ponds renovated and one new is made. 60 families benefit from these interventions	Earlier Quantum of water available was 22950 cu.m Now addition of 13079 cum water has been generated. Up to Rs. 40,000 additional income will be generated through fish rearing. Secured/protective irrigation for 45 acres of land during lean period of monsoon season.
3 earthen channels/nallahs have been renovated saving water up to 1155 cum from leakage. 55 farmers benefit through these interventions	Secured water is made available to adjoining agriculture field from these earthen nallahs through this exercise.
Construction of 2 core walls minimising seepage and saving 1400 cum water benefitting 75 farmers	Core wall reduces water seepage from the bund and retain water for longer period.
8 farm ponds(5%model) have been dug making available 5986 cu.m water benefitting 42 families	Farm ponds provide secured water for paddy cultivation during dry spells. Additional sources of income generated through fish rearing

Sustainability and way forward

The Project sustainability is ensured by mechanisms to involve all sections of the communities in selection of technical options, which are affordable, and environmentally and operationally sustainable. For this purpose, the source sustainability analysis is made part of the participatory appraisal at the community level. A sustained effort is being made to develop & strengthen "Village Development Committee (VDC)" of the particular village through, meetings, discussions, exposure visit etc. who will be responsible & accountable for the Panchayat/village councils in operation and maintenance aspects of all created structures under mandated plan of action and proper functioning. Women are also involved in various events as per mandated tasks and also during execution process. The focus is being given on the Institutional building at the local level with structured capacity building support and liaison with the local Government for developing end to end projects in the villages.

Awards & Accolades:

Growing together for building resilient communities- an enduring partnership between EdelGive Foundation & AFPRO

Appreciating AFPRO's efforts in enhancing livelihood opportunities of the rural poor

Strengthening the rural economy through Natural Resource Management

Expanding horizon from East to West, HDFC Bank Ltd under Holistic Rural Development Programme, in partnership with AFPRO, identified six villages of Bhilwara district, Rajasthan considering the backwardness of the area. The programme started in October, 2017 with the aim to improve the living standards of the rural community by building the capacity and increasing their active roles in development process in the aspects of socio-economic, education, health & sanitation, livelihood & employment, environment and natural resource management.

The project has been focusing on natural resource management, promotion of on-farm livelihood, water and sanitation, renewable energy, educational support, youth skill and entrepreneurship development programme, institutional building and solid waste management.

Project Title	Holistic Rural Development Programme in six villages of Bhilwara block of Bhilwara district, Rajasthan"
Duration	October 2017 - September 2020
Funding Agency	HDFC Bank Ltd
Location	6 villages of Bhilwara block of Bhilwara district, Rajasthan
Coverage	3563 HHs

MAJOR OUTPUTS & OUTCOMES

- Through adoption of scientific farming, on an average 2-3 quintal more yield obtained compared to traditional method.Cost reduction of about 40 - 50% by reducing the seed rate and fertilizer application
- 115 farmers attended two day Exposure Visit on new agricultural practices and livelihood
- 135 farmers trained on composting & its use to improve soil fertility & hence improve production
- Drip irrigation installation were promoted
- Renovation of School Toilet benfitting 304 students
- 700 people including school children, teachers & village leaders participated in awareness events organized on Sanitation, Health & Hygiene
- 55 lakh litre storage capacity created by renovating & desilting 2 community ponds
- 3 no. farmers with 3 acres land benefitted by 2 farm pond construction
- 77 farmers will be benefitting due to field bund with waste weir construction

Demonstration plot in Hoing

Water & Sanitation

Hydro-geological Investigation and Geophysical Prospecting to secure clean drinking water

Scientific approach to drinking water problem:

With the support of Odisha Power Generation Corporation Ltd, AFPRO as a technical partner collaborated with Society for Action in Community Health (SACH) to find solution for drinking water problem in the tribal villages falling under Lakhanpur block of Jharsuguda district, Odisha. The community was facing drinking water problem especially during dry season. Most of the existing open wells and bore wells get dried up in summer. Though three sides of the whole area is surrounded by Hiradkud dam catchments, due to dyke like structure and hard rock strata under the ground, the water source could not be recharged by dam. AFPRO's role was to conduct a technical feasibility study for identification of suitable sites for drilling bore wells for installation of hand pumps/ submersible pumps for water supply for drinking purpose which would benefit 937 families in the area. Geophysical prospecting was carried out by using ABEM-TERRAMETER, SAS-300 instrument and Vertical Electrical Sounding (VES). Schlumberger Configuration is the method as Vertical Electrical Sounding (VES) to understand the different litho layers beneath the ground to understand the thickness and apparent resistivity of each litho layers and its water holding capacity.

Project Title	Hydro-geological Investigation and Geophysical prospecting
Duration	2017 - 2018
Funding Agency	Odisha Power Generation Corporation Ltd
Location	Lakhanpur, Jharsuguda, odisha
Coverage	Drinking water security for 937 families

Key Interventions and Achievements

- Hydrogeological investigation conducted in 14 sites in different project villages
- Total of 8 sites recommended for drilling bore wells and installation of HPs benefitting 937 farmers families
- Community awareness created on clean drinking water

Groundwater Investigation at Village - Rengali, Block-Lakhanpur, Dist-Jharsuguda

Groundwater Investigation at Village - Tilia, Block-Lakhanpur, Dist-Jharsuguda

Stepping towards "Swatchh Bharat" through improved Sanitation in Block – Chakia, District - East Champaran, Bihar

Keeping pace with Swatchh Bharat Mission…….

Having vast open areas and agricultural fields, open defecation is habitual among villagers in East Champaran district, Bihar with limited awareness of the health hazards posed due to open defecation. Therefore, through systematic community led total sanitation programmes, the behaviour of the local communities needs to be broadened on the negative effects of open defecation and poor hygiene behaviour. Carrying forward the mission started in 2016 towards achieving ODF village, AFPRO with support from Monsanto India Ltd. proceeded to second phase of the Sanitation project in Khairimal Village of Jamunia Panchayat, Chakia block where 80% of the population belongs to Musahar community who are the most deprived communities not only in Bihar but also in other states. In this village, 95% households have no toilet and so they are forced to defecate in the open field and road side.

In context of ODF village, due to intervention of the first year, the coverage has increased to 30%. During the first phase, a total of 170 toilets were constructed in the village which was very much appreciated by the community and the Government. Emphasis was given on creating awareness on personal and environmental cleanliness, training and capacity building of the people to inculcate attitudinal change to use and maintain the toilets and the surrounding area clean as part of their lives.

Project Title	Stepping towards "Swatchh Bharat" through improved Sanitation in Block – Chakia, District - East Champaran, Bihar
Duration	December 2017 - December 2018
Funding Agency	Monsanto India Ltd
Location	Khairimal village of Jamunia Panchayat, Chakia block, District - East Champaran, Bihar
Coverage	250 families

Addressing the demand from the community and with intention to reach 60 % coverage till the end of 2018, a total of 225 HH toilets were proposed in the second phase of the project benefitting approx. 1000 people.

Interventions

80 household toilets have been completed till March 2018. Trainings conducted with regard to use and maintenance of toilets and personal hygiene

Impacts

Reduction in open defecation and behavioural change seen in the communities have a positive impact on environmental sanitation conditions of the village

Sensitization training on sanitation in Khairimal village

Constructed toilet in Khairimal village

AFPRO Action For Food Production

Holistic Rural Development Programme in 4 Villages of Umbling Block, Ri-bhoi District, Meghalaya

Reaching out to the most unreached

The Second phase of HRDP project at Upper Balian Villages in Umbling block of Ri Bhoi district of Meghalaya under HDFC Bank Parivartan, CSR initiative, targeted to reach out to 4 village communities and enable them to shift from a vicious cycle of poverty to a virtuous cycle of growth.

Ri Bhoi District is one of the least developed districts in the State with minimum basic facilities like schools, dispensaries, road and communications. The four selected villages are located in a very interior and inaccessible part of Umling Block of Ri-Bhoi district of Meghalaya. They are away from the main stream development scheme of the Government. Marginal farming and wage labour are the main livelihood options. It is of utmost importance that development interventions are being taken up in the said villages to improve their overall wellbeing. The project is in the initial stage of development and various developmental activities are planned during the course of project interventions, targeting poor marginal farmers, women and school children.

Project Title	Holistic Rural Development project, Umling block, Ri-bhoi district, Meghalaya
Duration	August 2017 - July 2019
Funding Agency	HDFC Bank Ltd
Location	4 villages of Umling block, Ri-bhoi district, Meghalaya
Coverage	193 HHs

With the objective to improve the village overall status through empowerment of the community, enhancing various livelihood opportunities and developing basic infrastructures in a participatory & sustainable manner following activities were carried out.

Energy efficient chulla - a step towards clean environment

Interventions

- 152 homestead garden plots set up with support and guidance from AFPRO
- 3 awareness/capacity building programme conducted; 1 exposure visit organized for 3 villages (30 people) on composting and organic farming
- Drinking water facilities improved by introducing four schemes with 5 stand posts in one village
- 158 smokeless chullas distributed among beneficiaries
- 76 household toilets constructed

RAISING THE DIGNITY OF WOMEN

CASE STUDY

Serbina P Marak of Umsarang village used to have a traditional bamboo toilet which often needs maintenance and lacks proper hygiene and sanitation. Before the intervention of HRD Programme of HDFC bank, the ladies in the village had received sanitation training by ASHA workers. Realizing the importance of healthy toilet in a healthy environment, they welcomed the initiative whole-heartedly as the women folks wanted a change. Among 32 toilets constructed in the village under HDFC HRDP, one of the beneficiaries was Serbina Marak.

Ever since the toilet was constructed for her family, all family members (6) are very happy to use the toilet and very vocal about its benefits as it gives them a clean place with privacy, devoid of odours and germs and insects. Their toileting habit also has improved and disease incidence reduced among children after using the pucca clean toilet. Now her life has become better and her dignity upheld with construction of improved hygienic and private pucca toilet in her household.

Holistic Village Development Project in 19 villages of Kalahandi District, Odisha

Managing natural resources and mitigating climate change impact on life and livelihoods towards Sustainable development

Kalahandi is one of the economically backward districts of western Odisha with a geographical area of 7920 Sq. The whole Kalahandi district is an arid region, very often reeling under severe drought condition due to low and irregular rainfall pattern. The region had a glorious past and great civilization in ancient time. Archaeological evidence of Stone Age and Iron Age human settlement has been recovered from the region. Majority of the people belong to SC, ST landless, marginal or small farmer groups whose main occupation and livelihood is agriculture. With no irrigation facilities available, they practice rainfed agriculture with mono-cropping pattern with paddy cultivation in low land and cotton cultivation in high land as their main crop during the year which often fails due to extreme climate variation. To improve rural economy by adopting various sustainable livelihood options and developing existing water sources, HDFC in partnership with AFPRO initiated Holistic Village Development Project Programme in 19 villages in Kalahandi. The project has been going on since last two years and the specific and targeted interventions have resulted in sustainable livelihoods ensuring improved quality of life for these poor communities.

Project Title	Holistic Rural Development Programme (HRDP)
Duration	October 2017 - September 2018
Funding Agency	HDFC Bank Ltd
Location	Kalahandi District, Odisha
Coverage	4000 tribal families

Interventions

- Supported kitchen garden/ vegetable cultivation in Kharif and Rabi season. 353 farmers & 47 acres of land covered.
- Vermi compost bed distributed to 114 farmers in 12 villages.
- 29 Nadep compost pits made.
- Supported and trained 21 famers on Modern on SRI/Line transplantation. covering 11.5 acres of land in 2 villages.
- 290 farmers supported with poultry birds of 25/family.157 farmers supported with 1doe each with 1buck on community basis in 11 villages, along with training on rearing animals and birds and improving general health of the animals.
- 6 women SHGs (104 members) supported with financial help with their various enterprises, like spice, badi, papad, tent, grocery and dal processing business.
- 233 hand pumps, platforms, drainage line and soak pits repaired, 36 new ones installed in all 19 villages.
- 80 individual household toilets constructed.
- 29 WASH programmes organized in 21 schools benefiting more than 2500 students. 200 flex board installed in 19 schools.
- 14 new irrigation wells constructed and 10 existing irrigation wells renovated benefitting 55 farmers .
- 2 new community ponds excavated benefiting 320 families for agriculture and domestic purpose in 2 villages and 10 farm ponds excavated in 5 villages.
- 1 new check dam constructed bringing 30 acres of land under irrigation and 40 farmers benefit out of it. One new water reservoir constructed bringing 12 acres of land under irrigation and 25 farmers benefit out of it.

Outcomes

- On an average of Rs 6000/- earned depending on the area covered by each farmer after self- consumption. Better yield and diversification of crop resulted in better financial security.
- Near about 70% farmers use the vermi bed for the production of bio fertiliser and use in their farm. Others sell the product and earn extra money, 60 acres of land covered.
- On an average 3-4 quintal more yield per acre obtained compared to traditional method.
- On an average poultry farmers earned Rs. 4000/- to Rs. 6000/- each after self-consumption. Goats are multiplying every six months. About 20% farmers earned Rs. 8000/ to Rs. 10000 per year. Farmers gained knowledge and skills on poultry/ goat rearing with regard to selection, shed, food and water, identification of diseases and treatment, caring and marketing.
- On an average each member earning 25000 to 30000 in a year depending on the type of business they are engaged in. Women are becoming more enterprising, expressive and outwardly and group spirit increased among members.
- Safe & timely access of safe drinking water for 4820 community members and 200 school children made available round the year with neat and clean environment around the drinking water sources.
- Family members especially women have access to safe and proper sanitation and hygienic facility at home.
- 2500 students and 4500 community members have become more aware of WASH. Gradual behaviour changes are observed.
- These farmers availed protective irrigation facility converting 61 acres of land productive and generating employment in their own land for the whole year.
- On an average 10000 cum water retained. Around 100 kgs of fish cultivated and sold for Rs16000/- from Badkhairimal pond. Through farm ponds 5663cum water is available for 34 farmers and secure approx. 52 acres of land for protected irrigation.
- Approximately 4000cu.m water will be stored. It can also be used for fish rearing in the area. Helps to change 10 acres of barren land into cultivable land. On an average 1800cu.m water stored and helps to protect 12 acres of Kharif crops in lean period of monsoon with recharging of ground water.

- 107 Solar street lights installed in 19 villages covering 20 families per street light .A total of 3560 families benefit from these street lights.
- 11 Govt. schools renovated like floor and slab repairing, toilet repairing, repairing of door and window, installation of fans with electrical wiring and water filters.
- 4 model toilets & 2 normal toilets constructed with water facility at 6 schools.
- 8 nos library established with distribution of tables, chairs, almirahs, books, playing materials and first aid kits and sports kits in 8 schools.
- Renovation of 10 Anganwadi Centres with toilet facilities, water filters along with playing materials provided benefitting 920 students.

- Brings proper lighting system in the villages and reduces nocturnal incidents.Under the light, children do their homework and elders gather for meeting and interaction.
- More than 2000 students availed better seating facility with conducive study environment in the school.
- 1510 students accessed safe and better sanitation & drinking water facilities. The students became aware on caring of sanitation and hygienic condition of self.
- Approximately 1800students benefitted with better seating and environmental, general & geographical knowledge increased by this intervention.
- It will increase children's curiosity and creativity and ease the process for visual learning. Installation of water supply system ensured adequate drinking water facility for all the children. The toilet facilities helped to increase the habit of toilet use and aware on sanitation and hygiene.

Ghar Wapasi

CASE STUDY

Nishamani Naik hails from a village called Haldi- 20 km from Bhawanipatna, Kalahandi District. He is a marginal farmer, having 2.5 acres of land. His family consists of his wife, his son, daughter-in-law and a grant child. He used to cultivate cotton in his land, but that did not yield enough income for the family to survive. Therefore the whole family migrated to Sampalpur in search of job thinking that they would be better off in the city. Initially he did some odd jobs but that too did not last long. Soon he realized that all his dreams and hopes are shattered as he and his family faced hardship and suffering in the city. Finally he took up rickshaw pulling for survival. He did rickshaw pulling for 10 years just for survival and feeding the family.

One summer, when he came to his village to visit his relatives and see his sparingly cultivated land, he witnessed some of his neighbours cultivating vegetables in their plot of land and earning good money. He enquired from them what inspired them to take up vegetable cultivation. Through them he came to know about AFPRO activities and how it helped them to cultivate vegetables in their small plot of land. He also attended a farmers' training programme on vegetable cultivation organized by AFPRO in his village. That motivated him to turn to his own agricultural land to take up vegetable cultivation intensively. The whole family is back to the village now and all family members are involved in vegetable cultivation.

Integrated Rural Development Approach through improved Water & Sanitation and agricultural practices

Consecutive droughts are a cause of continuing concern for the South Indian States of Karnataka, Telangana and Andhra Pradesh. The effectiveness of conventional strategies for drought mitigation has been declining, creating the need for the introduction of a more holistic approach for management of water resources.

Due to depletion and over exploitation of ground water over the years, water for both irrigation and drinking has been a major concern and hindrance for the development of villages in Telangana, Karnataka and some parts of Andhra Pradesh. The changing trend in the rainfall pattern and continuous drought for 2-3 years have adversely affected the agriculture sector and integrated development as a whole.

Supported by Mahyco - Monsanto Biotech (India) Ltd. AFPRO has been working in several drought prone districts of Andhra Pradesh & Telangana and Karnataka since 2015 to ensure access to adequate safe drinking water and sanitation at the household and community level, augment ground water resources by artificial recharge methods and promoting climate resilient agriculture to ensure food security, build resilience of agricultural systems and adaptive capacities of farming communities to climate change and variability.

Project Title	**Stepping towards "Swatch" and "Unnat" Bharat: An Integrated Rural Development Approach through improved Water & Sanitation and agricultural practices in three States of Southern India"**
Duration	April 2015 to March 2019
Funding Agency	Mahyco - Monsanto Biotech (India) Ltd.
Location	19 Villages in 6 Dt. in Andhra Pradesh Telangana & 20 villages in 7 Dt. Karnataka
Coverage	3000 Households in the area of drinking water, irrigation water and Sanitation.

Interventions	**Impacts**
❖ 18 cisterns (mini water tanks) built provides water to 216 households near to their houses less than 100 mts. ❖ 5 RO plants installed supporting 3400 people. ❖ 3 RO plants installed in three schools benefitting 662 students. ❖ Constructed 165 household toilets. ❖ Constructed toilets in nine village schools benefitting 4000 children. ❖ Constructed 15 injection bore wells helping 261 people.	❖ Availability of clean drinking water & no wastage of water as it is stored in the tank and the beneficiary can collect water as per their need and time. ❖ Filtered water is available in the village itself and respective schools. ❖ Water borne diseases are controlled by the intake of clean water. ❖ Open defecation and water borne diseases reduced in the area. ❖ Attendance of the girl children increased from 65% to 95 % and a sense of security and privacy instilled in them. Children are well aware of the ill effect of open defecation, health and hygiene related issues and problems. ❖ 305 acre land ensured with irrigation. Bore-wells used to remain dry for six months. After construction, water in the bore well has increased to 8-12 months 209 bore wells replenished with additional 68650 cu.m. Gram Panchayat and beneficiaries actively participate for cleaning of the structures created.


Recharge pit in Kadanur, Bengaluru Rural District


RO Plant in Dammalli, Haveri District

Integrated Sustainable Rural Development Project (ISRDP) in Mahasamund block of Mahasamund district, Chhattisgarh

Project Title	Integrated Sustainable Rural Development Project (ISRDP) in Mahasamund District, Chhattisgarh	
Duration	July 2017 - June 2019	Jan. 2017 - Dec. 2018
Funding Agency	HDFC Bank Ltd	
Location	5 villages of block & district of Mahasamund	8villages of block & district of Mahasamund
Coverage	1673 families	3049 families

Chhattisgarh and other parts of the country are facing the challenge of maintaining a balance between natural resources preservation and sustainable crop production system. Of the various effects that climate change is likely to have on ecological, social and economic system, many are in some way or other related to change in water cycle. Increasing temperature will affect hydrological systems, alter rainfall, magnitude and timing of run-off, moisture level in the air and soil and groundwater level. These changes are being felt by the tribal farmers of Chhattisgarh, whose livelihood activities are directly dependent on rainfall and availability of surface and ground water resources. In the present context, it can be said that proper and planned development & management of water resources, improved agricultural practices and improved skill & knowledge at local level can enhance the overall condition of the rural farmers of the State. In collaboration with HDFC Bank Ltd, AFPRO has been working in these areas to tackle the growing challenges of sustained agriculture, thereby improving the livelihoods of the poor & marginalized tribal farmers.


WASH Programme - Village Jalki, Tumgaon Cluster

The present project is an extension of the project started in 2015 supported by HDFC Bank Ltd covering 5 villages under Mahasamund block of Mahasamund district, Chhattisgarh State. After completion of the 1st phase, covering 5 villages another 3 more villages were covered in the second phase. At a later stage another cluster called "Khallari" consisting of new 5 villages of the same block was initiated. This project is benefitting 4722 families, 1206 school children and covering more than 357 acres of land.

Focal Areas	Outputs & Outcomes	
Natural Resource Management	9 Community ponds renovated benefitting approx 1085 families	49123 cu.m additional storage capacity created
	4 Farm ponds created benefitting 4 families	Created 253 cu.m storage capacity supporting fish farming & protected irrigation facilities for 6 acres land
	19 Roof top rain water harvesting structures constructed benefitting 1436 students	Added approx. 1683 cu.m ground water recharge annually
	57 Hand pumps renovated/repaired benefitting 863 school children & 822 nearby villagers	Availability of safe & hygienic drinking water
	5 overhead tanks-Solar cisterns constructed benefitting approx. 205 families	10-12% of population get improved & safe drinking water access. Generates 1800 KW/yr & saves upto 7200 unit/yr
	2 unit Solar PWS installed benefitting 105 families	Generates 216 KW/Yr and saves up to 1440 unit/year
	8 soak pits constructed benefitting 195 families	Hygienic environment around the drinking water sources & reduced water logging
	3 check dams constructed benefitting 45 farmers covering 85 acres land	Helps to secure 55 acres Kharif crop field & 30 acres barren land converting it to cultivable land
	3 no. Nallahs treated generating additional 2064 cu.m quantum of water benefitting 45 farmers	Increased ground water level-supporting farmers to take up a second crop
	20 Farm ponds constructed benefitting 20 families having 12000 cu.m storage capacity	Approx. 50 acres of land secured in Kharif season
	Constructed 1 no. gabion	Helps to reduce soil erosion & protect the downstream structures from early siltation
	400 Energy efficient chullahs distributed	Save 60-65% of fuels & positive environmental impacts by reducing carbon dioxide emission
	146 no. Solar street lights fixed benefitting 2546 families	Provides proper lighting system & saves up to 1725.6 KwH/year

Skill development & livelihood enhancement	23 farmers practiced SRI technique covering 21 acres land. 70 farmers adopted Rabi Crop Diversification covering 64 acres land. 19.75 acres barren land levelled covering 21 farmers. 55 women members trained on Mushroom Cultivation. Training and hand holding support provided for brick making to 13 SHG members. Agriculture Resource Centre established benefiting 248 farmers covering approx. 100 acres. 203 farmers participated in exposure visit for Promotion of modern agriculture.	On an average of 3-4 quintal/ acre yield, obtained more than the yield from traditional method. 94 % of the total farmers adopted the 2nd crop as wheat [rather than the traditional paddy] in Rabi Season. Whole land become cultivableIncome generated per family per two months is Rs 800/- to 1000/- Income generated per family per year is Rs 15000/- to 18000/- Income generated per family per five months is Rs 4000/- to 6000/- Easy access to modern agricultural equipments & practices. Knowledge enhancement about modern agriculture techniques.
Health & Sanitation	61 Nadep units constructed benefiting 61 families. Constructed 16 School toilets & conducted 21 WASH Programme benefiting approx. 1200 students and 250 villagers.	Can produce compost of approx 860 Quintal/yr for 151 acres land/season. Improvement in Health & Hygiene practises. Increased awareness & orientation on Sanitation & personal hygiene.
Education & Infrastructure	Informative wall paintings done in four school benefiting 336 children. Provision of playing Instruments to 20 Anganwadi centres benefiting 609 students. 23 no. special days celebration conducted & approx 3065 students participated.	Improves the visual learning of children. Improves the overall growth of children.

SRI Practice, Achanapur,Tumgaon cluster

5% model farm pond-Chhaporadihdih,Tumgaon cluster

Check Dam Construction, Village Lohardih, Tumgaon Cluster

Sustainability and way forward

The water structures, school /anganwadi structures are developed in convergence with PRIs, VDCs and school authorities. They will take care of the operation and maintenance of these structures. VDCs are formed in each village for water management and further development work, who will be responsible & accountable for the Panchayats/village councils to coordinate all community works. But strengthening the VDCs and transforming them into resource centres/ institution is a concern to be dealt with for long term sustainability and realizing greater impact in the water sector, livelihood and over all development. Continuous sensitization of the communities on development issues and concerted effort from all quarters with institutional back up is the way forward for sustaining the development initiatives.

CASE STUDY

Boosting Entrepreneurship and Economic independence among women by venturing into new livelihood alternatives

Four women SHGs from Khallari, Navagaon, Kosrangi and Dhansuli villages of Mahasamund block of Mahasamund district, Chhattisgarh ventured into mini mushroom cultivation supported by HDFC Bank Ltd. Attempts have been made in the past to empower women and communities through different government projects which did not produce any special result due to vague community zest. Agriculture is the main occupation of the village masses. Only paddy is the main crop during Kharif season. There was no possibility for Rabi crop initiation and other agricultural practices due to lack of water. In view of these circumstances, with the objective of sustainable livelihood and market prospects, efforts have been made to set up mushroom production units through SHGs. Technical support, training and supervision for mushroom production was given by AFPRO. Catalyst, mushroom spam and safety kit (mask, apron, hand gloves) costing around Rs. 3000/- for each SHG was provided. Cycle of 45 days is the duration for the growth of the mushroom. As the part of marketing and popularize the mushroom and its benefits, awareness campaign was conducted in the villages by the SHG members.

Changing the way of income generation

Before the intervention, there was only rain-fed agriculture as the prime source of income. The village community did not have any idea of engaging themselves in any other activities, which would help them financially. Now mushroom production has become an income source for these families and set an example for the villagers and other SHGs. They produced a total of 155 kg mushroom in one cycle and sold it @ Rs. 200/kg, getting a profit of Rs. 31000/-after self-consumption of approximately 40 Kg of mushroom adding nutritious food value to the family members. This activity has motivated these SHG members and triggered their mind to continue with the unit of mushroom cultivation which will result in their financial security in the long run.

Woman engaged in mushroom cultivation in Mahasamund block

Community Health care and access to Safe Drinking Water

Safe drinking water leads to robust health

Considering the fact that the rural communities in several parts of India has become devoid of safe drinking water and health awareness, Larsen & Toubro (L&T) Financial Services under CSR initiatives partnered with AFPRO having similar agenda of promoting health and safe drinking water facilities among the communities.

With the objective of enhancing accessibility of safe drinking water and health services to rural communities, a two year project was conceptualized in 2016 for 9 villages of three districts i.e. Akola, Amravati and Bhandara in Vidarbha region of Maharashtra.

Project Title	Community Health care and access to Safe Drinking Water
Duration	March 2017 - December 2017
Funding Agency	Larsen & Toubro (L&T) Financial Services
Location	9 villages of Akola, Amaravati and Bhandara district in Vidarbha region of Maharashtra
Coverage	21741 families

The activities were planned strategically with a focus on Women and adolescent girls and implemented following the participatory tools like HH survey, FGDs, etc.

Woman benefitting from Community Health Camp

MAJOR ACHIEVEMENTS

- 14 Community health camps organized (for Women and adolescent girls) benefitted 3988 beneficiaries under the project.
- 3 number RO purifier installed in Lakhegaon, Sheghat & Kapustalni village benefitting 15,039 beneficiaries.
- Desiltation of percolation tank in Kapustalni and Lakhegaon villages benefitting 3940 beneficiaries.
- Deepening and widening of stream-creating 6300m^3 water in Sawari village, 9600m^3 water in Mana Village and 5418 m^3 water in Lakhegaon village.


RO Inauguration- Lakhegaon


Desiltation of percolation tank in Lakhegaon

MAJOR OUTCOMES

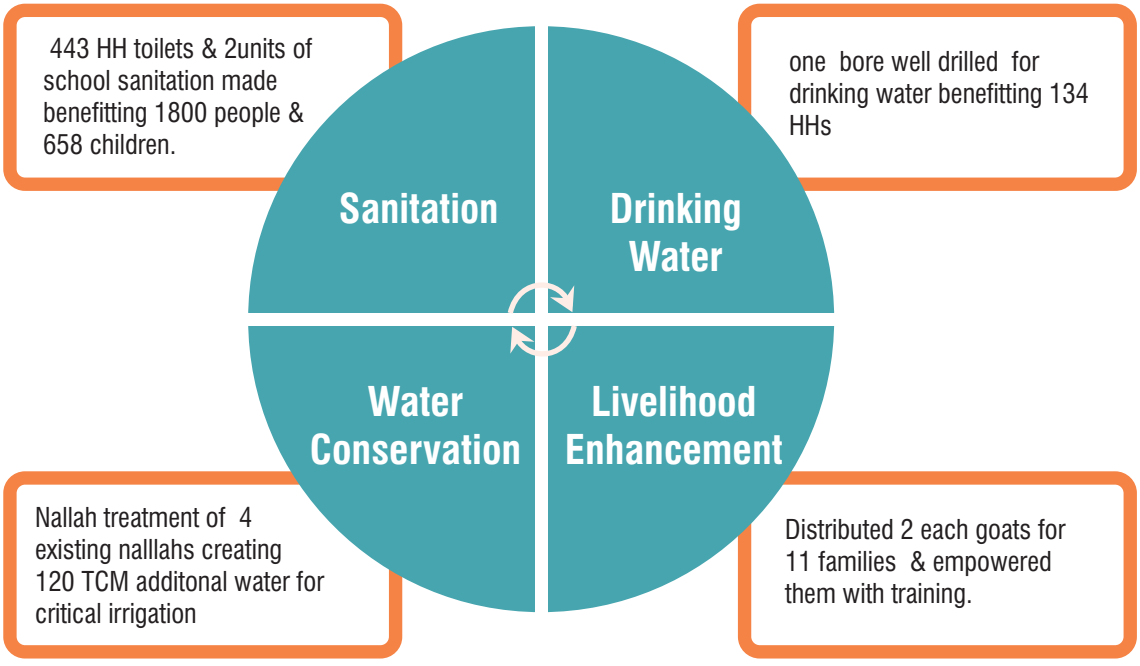
- Due to RO system, villagers access safe drinking water in the village itself.
- Increased water harvesting capacity by about 19,000 m^3 due to water conservation interventions

AFPRO Action For Food Production

"Improving lives of people in distress through integrated approach of livelihood enhancement and water & Sanitation services

Mahyco Monsanto Biotech (India) Pvt. Ltd has been in the forefront, working with rural communities to lift their socio-economic standard of living by addressing their basic needs of sustainable livelihood and alleviating their water and sanitation crisis. This project is one such service undertaken by the company and implemented by AFPRO in 25 villages of six districts - Yavatmal, Akola, Amrawati, Washim, Jalna, and Aurangabad in Maharashtra, targeting a population of 53400 (8900 families). Majority of the target families belong to schedule caste & tribal category whereas the percentage of BPL families is up to 80%. This project addresses one of the fundamental rights of the Indian Constitution i.e, Access to safe drinking water & sanitation through adoption of integrated approach for Water Conservation and Sanitation along with adopting participatory approach with a focus on Women Empowerment.

Project Title	Improving the quality of lives of communities through integrated approach on water conservation, Sanitation, Sustainable Agriculture and Women Empowerment
Duration	April 2015 - March 2019
Funding Agency	Mahyco-Monsanto Biotech (India) Ltd.
Location	25 villages in 6 districts of Yavatmal, Akola, Amarawati, Washim, Jalna and Aurangabad in Maharashtra
Coverage	8900 families



Nallah Treatment work in Anna river - Jalna District

Clean household toilets-a clear relief especially for women

SHG training on incense stick

CASE STUDY

Catching them young through E-learning & Exposure

Quality of human life has improved dramatically over the past decades due to rapid advancement in the field of information technology, communication, amazing discoveries and infrastructure development. But the effect of such progress is not felt by the majority of rural population as the improved technology and communication is yet to reach the rural community.

In this scenario, there stands out a village primary school in Bhivgaon village in Jalna District. It is a co-ed school with 250 children from Class 1 to 8. With the intervention of Mahyco Monsanto Biotech Ltd , the school has been provided with a smart class room with overhead projector. This is first of its kind in the whole project area. Every class gets one period every day for e-learning and exposure. Children wait for this interesting class with moving images startling dialogues, videos and audio on various topics which trigger their inquisitive mind and imagination, going beyond their lethargic class room learning with books and black boards. The children have expressed their feelings thus: We are able to see the images of the universe, the planets, the stars, the satellites, the galaxies and other celestial bodies. We are seeing for the first time animals like camels, kangaroos, roaring lions in the forest, places like deserts, Himalayas, other mountains, ocean, ships and light up cities and towns with skyscrapers.

This school with e-learning facility is a testimonial as to how effective, informative and interesting the learning process can be if the latest technology is used. The grasping of even the difficult concept becomes easier through seeing and experiencing. That is what the children of Bhivgaon village have proved. Their self confidence has increased, they express themselves without any inhibition; they ask questions to strangers with an inquisitive mind using the opportunity to learn more about the outside world. Their intellectual capacity has increased, their knowledge level has improved through the exposure they get from the smart class. Their motivational level is very high as they want to become somebody great in future. All these prove that they have become smarter through smart class even though they are from a village school. They have expressed their desire to have one more smart class room as one is not enough to cater to the needs of 250 children in the school.

The smart class room is also a great asset to the community. The facility is an effective means of learning and capacity building of the community, IEC programme, awareness creation on social issues and taboos and raising the bar of external exposure and general information, thereby improving the quality of rural life in general.

Improving the Lives of People through Participatory Management of Environmental Resources (Water & Greening)

"Water & Greening" as one of the key initiatives of Mondelez India Foods Private Limited under its CSR programme - *Shubh Aarambh* in partnership with AFPRO has completed three successful years. This programme has footprint in 3 States- Maharashtra (Induri), Madhya Pradesh (Malanpur) and Himachal Pradesh (Baddi) covering a total of 15 villages.

This project is an effort towards sustainable development of villages nearby Mondelez factory locations through integrated participatory approach for environmental management, minimizing the adverse effects of growth and development. Community participation in this process has been seen as an important driver to steer up the process and replicate it at larger scale in collaboration with the local Government. Understanding the need of continuous intensive community sensitization for developing ownership among community to ensure operation and maintenance of the infrastructure created in the project, Mondelez India Foods Private Limited has shown interest to expand the coverage of these projects in terms of reach and number of beneficiaries.

Project Title	Improving the Lives of People through Participatory Management of Environmental Resources (Water & Greening)
Duration	June 2015 - September 2018
Funding Agency	Mondelez India Food Pvt. Ltd
Location	15 villages of 3 States-Maharashtra, Himachal Pradesh and Madhya Pradesh
Coverage	Approx 5000 families

Outputs & Outcomes

	Maharashtra	Madhya Pradesh	Himachal Pradesh
Drinking Water	3790m drinking water pipeline installed benefitting 325 HHs One 1000 LPH RO installed & 200 water jars distributed benefitting 200 HHs	Training of Village water committee for O& M of RO installed	Installed 2 ROs of 1000 & 500LPH capacity benefitting approx.200 people.
Soil & Moisture Conservation	Increased water storage capacity to 70 lakh litres due to deepening & widening of existing nallah covering 50 Ha area benefitting 12 farmers Constructed 2 water harvesting pond of 50 TCM	Desilting of ponds created additional 4400 cum of water storage Desiltation & deepening of 2 km agriculture drain bringing 700 bigha agricultural area benefitting 70 farmers	Constructed RCC outlet/spillway of check dam 21 gabions & 2 silt retention ponds developed having 27 lakh litres water storage capacity. One additional pond developed at upper catchment area of 6 lakh litres water storage capacity.
Greenery Development	370 homestead trees distributed to 185 families 265 ornamental & horticulture trees were planted on Gram Panchayat land Distributed 7 waste management bins	Planted more than 80 plants near Dadura Dham Temple	115 plants planted in schools and Mandir premises 6 Awareness drives on water conservation carried out benefitting 235 students

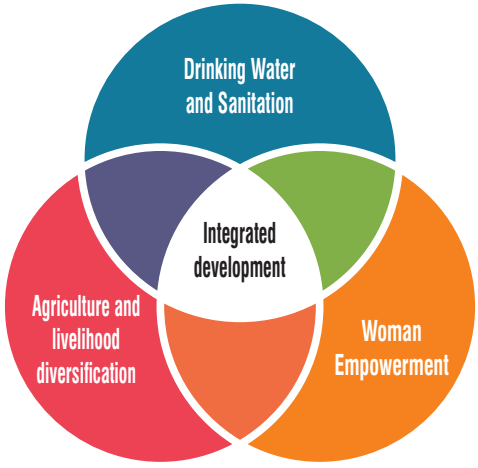
Distribution of water jars in Kanhewadi village-Induri

Integrated Development Project with focus on Water, sanitation & livelihood at UT of Dadra & Nagar Haveli (Silvasa)

Promoting community based approaches for ensuring better lives for vulnerable groups

Project Title	Integrated Development Project at UT of Dadra & Nagar Haveli (Silvasa)
Duration	April 2015 - December 2017
Funding Agency	Monsanto India Ltd.
Location	5 villages in Dadra and Nagar Haveli (Silvasa)
Coverage	Approx. 1000 Families

Tribal communities have been placed in the bottom of the development pyramid mainly because of their economic backwardness and insecure livelihood. The main issues hindering their development are poverty, illiteracy, exploitation, land alienation, unprofitable agriculture practices, disease, unemployment and slow process of integration. To bring holistic development among tribal communities, AFPRO in partnership with Monsanto India Limited initiated integrated tribal development programme in 5 villages in Dadra and Nagar Haveli (Silvasa) focusing on agricultural and livelihood diversification, drinking water, sanitation and hygiene promotion and women empowerment.




Drinking Water facility at Vasona Gadherpada

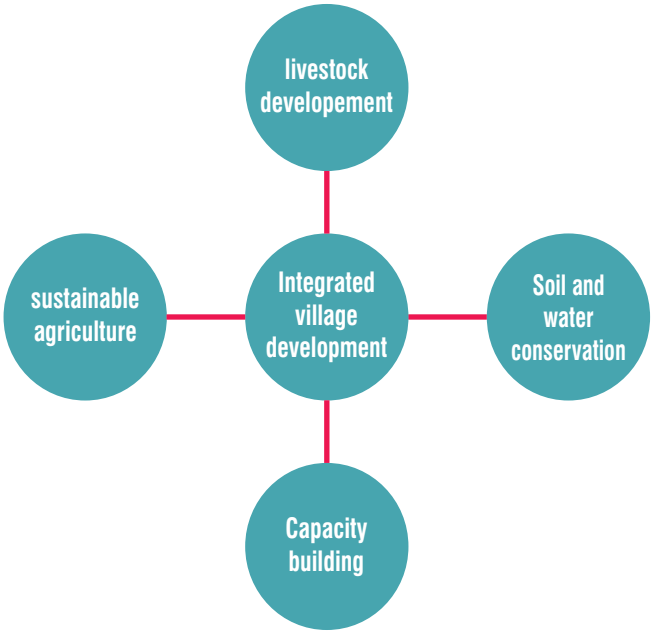
Interventions	Impacts
❖ Formed 3-group Irrigation systems consisting of 18 farmers in 3 hamlets by supporting infrastructure like creation of 6 borewells, installation of pipeline, motor and construction of pump house.	❖ Generating additional income of Rs 60000 to 80000 a year. Around 20 ha area has brought under update irrigation ❖ Dual cropping promotion-paddy & vegetables.
❖ Construction of 25 poultry sheds along with training on Poultry rearing in convergence with Animal Husbandry department & Dena rural bank.	❖ Additional income generated through sale of eggs and birds and nutrient intake increased among family members
❖ Promotion of homestead vegetable cultivation through demonstration plots. 10 Women farmers were covered through this intervention in 3 hamlets of Vasona Village.	❖ The families are now growing fresh and organic vegetables for their self-consumption; the surplus is sold in the market adding some income to the families
❖ Bore well and installation of hand pump - water supply through pipe line and stand posts from ESR Tank of 15000 capacity. ❖ 94 household toilets completed	❖ Access to drinking water facility near to their house for 60 families. ❖ Around 420 people have benefitted by accessing better sanitation facility.
❖ Organized health check-up camps in various villages for diabetes & Hepatitis-B, eye check-up and general check- up facilities. 4 number of training cum awareness camps conducted	❖ Benefitted 180-200 people primarily women and children.

Integrated Village Development in 8 villages of Akola district of Vidarba region

With limited options to enhance the livelihood opportunities of the impoverished and marginal farmers in Vidarbha region, agriculture as their main occupation and source of income has become unsustainable with extreme climate variability and depleting ground water accelerating their crisis. Therefore the distressed farmers are leaving their agricultural field and migrating to cities for a gainful job to sustain their families. To alleviate the agrarian crisis, HDFC Bank Ltd in partnership with AFPRO implemented the project to improve the quality of lives of people by promoting adoption of integrated approach for water, sanitation, sustainable agriculture and livelihood enhancement in 8 selected villages of Akola District of Maharashtra

Project Title	Integrated Village Development in 8 villages of Akola district of Vidarba region
Duration	July 2017 to June 2020
Funding Agency	HDFC Bank Ltd
Location	8 Villages from Akola district of Vidarbha region of Maharashtra
Coverage	5945 HHs

MAJOR COMPONENTS




Vermi Compost production demonstration at Yeranda village

MAJOR ACHIEVEMENTS

Food Security and Livelihood

- 167 farmers participated in 16 no. of farmers training on agricultural practices in which 167 farmers participated.
- Organized a farmers' exposure visit for 46 farmers for exploring the improved agricultural practices/ technologies.
- Promoted use of organic manure; 100 vermi compost units constructed in 8 villages.
- 4 livestock health camps organized in which 584 livestock checked and awareness on preventive health measures, promotion of fodder seeds and cultivation practices imparted to farmers.

Drinking water and sanitation

- 6 RO systems installed in 6 no. of School, drinking water facility created in two other schools benefitting 1275 students.
- Constructed sanitation unit for 2 school - benefitting 368 school children.
- Training on improved WASH practices conducted in 6 schools.
- School library established in 7 schools benefitting 1168 children.
- 4 health camps organized in which 368 people participated.

Soil and Water conservation

- Organized 16 farmers training on agricultural practices in which 167 farmers participated.

Renewable energy

- 43 LED street lights installed in 8 villages

Provision of Community Irrigation, health and sanitation in the UT of Dadra and Nagar Haveli (Silvasa)

Raising the bar of healthy living through community resource development and adopting integrated livelihood approach

The source of income for the tribal communities at Dadra and Nagar Haveli is agriculture - a challenging livelihood option due to obsolete agricultural practices fragmented land holdings and absence of proper irrigation facilities. AFPRO, partnering with Voltas Ltd has been working with tribal communities to enhance quality of their lives by focusing on improving agricultural practices, water for irrigation, sanitation, health and hygiene and promoting alternative livelihood to bring better sustainability of lives and livelihood in line with SDG 10 by reducing inequalities among all.

Project Title	Provision of community irrigation, health and sanitation in the UT of Dadra & Nagar Haveli (Silvasa)
Duration	Jan 2016-May 2018
Funding Agency	Voltas Ltd
Location	5-Villages-21 hamlets/pada from 2 Gram panchayats of the Union Territory of Dadra and Nagar Haveli
Coverage	4797 tribal population covering 824 Households

Objectives

- To increase the irrigation potential in the villages by creating community/group irrigation facilities
- To undertake training and demonstrations for intensive agriculture and crop diversification
- To build capacities of local institutions/CBOs (water user groups, water & sanitation committee, SHGs, Gram Panchayat etc.) for creating better living conditions and coordination among the communities.
- To educate community on better health and hygiene practices

Interventions	Impacts
❖ 10 water user groups formed consisting of 5-10 farmers in the villages of Demani, Nanarandha and Waghdhara; supported with infrastructure like bore wells, pumps, pipe line, and pump house and water distribution network.	❖ 65 farmers capacitated on better management of resources for economic benefit. Training in multi-cropping increased the annual income by 50 %. Around 75 ha of land is brought under assured irrigation.
❖ 19 tribal families trained in kitchen gardening	❖ Women are empowered through cultivation of vegetable crops as an alternate occupation; increases their family income by 50%.
❖ 54 sirohi breed she goats and 6 bucks distributed among 11 tribal families along with vaccination and insurance cover	❖ Annual income increased upto Rs. 75000/year by selling excess milk and full grown goats
❖ supplied 75 poultry birds availing government schemes	❖ Annual income increased significantly by selling eggs and poultry birds after self-consumption
❖ Introduced cultivation of mushroom among 11tribal women in Nanarandha village.	❖ Rs. 96000/-.earned by mushroom farmers as an alternate livelihood option
❖ 84 twin pit model household toilets constructed and 10 awareness camps organized; 503 peoples participated.	❖ Benefitting 1260 people - improving personal hygiene and household sanitation
❖ Promotion of construction of 10 farm ponds/dug out ponds with polythene lining to avoid seepage and water loss	❖ 3632 cu. m of surface water saved; improved the soil moisture conditions

AFPRO
Action For Food Production

Working towards women health improvement and alleviation of malnutrition in children in Rakholi and Sayali villages of Dadra & Nagar Haveli

Supported by United Way of Mumbai, the project aims at bringing health awareness to reduce malnutrition among the tribal women and children of Rakholi and Sayali Villages of Dadra and Nagar Haveli. Great improvements have been made in the country through Govt. sponsored programme like Integrated Child Development Services (ICDS) and Public Distribution System (PDS), but there still remains a great number of malnutrition related illnesses that are still present in the country and remains a major public health issues. It is observed that one of the major causes of malnutrition in India is economic and social inequality. Due to the low social status of some population groups, their diet often lacks in both quality and quantity. Women and children suffer the most as they do not have the capacity to follow a healthy dietary pattern to improve their health. Improving nutrition can have a powerful multiplier effect to achieve **Good Health under Sustainable Development Goals (SDG) 3.** Indeed, the Global Nutrition Report 2017 calls for nutrition to be placed at the heart of efforts to end poverty, fight disease, raise educational standards and tackle climate change.

Project Title	Interventions for Betterment of Health & Nutrition for Women & Children in Silvasa
Duration	May 2017 - March 2018
Funding Agency	United Way of Mumbai
Location	4 villages of Rakholi and Sayali Villages of Dadra and Nagar Haveli
Coverage	6096 families

Woman health improvement and Alleviation of Malnutrition in Children

- Health Check camp
- Infrastructure support to Anganwadi Centres
- Training and Capacity building

Interventions

- 3 health check camps and 16 health and hygiene awareness programme organized
- 6-Anganwadi centres equipped with water filtration system, furniture and other accessories
- Training and capacity building of Anganwadi Staff

Impacts

- 270 beneficiaries attended the camp and 300 Women covered under health insurance
- Improved overall function due to additional infrastructure development, benefitting to the tribal children
- 6 Anganwadi centres get benefitted under the training programme with knowledge and IEC material

Blood test report distribution

Health camp report distribution at Karad Khadipada

Watershed Development

"Water Augmentation Project" in Sawai Madhopur-A water conservation Approach

Expanding the horizon for addressing the vulnerabilities of local communities of Rajasthan, Coca Cola India supported the second phase of "Water Augmentation Project" in Sawai-Madhopur district.

Groundwater acts as critical buffer against the variability of monsoon rains. Farmers use excessively ground water for irrigation as it has twice the crop productivity of those that rely on surface-water alone. An increasing number of aquifers are reaching unsustainable levels of exploitation. This historical district of Rajasthan having approx. 75 stepwells shows that from many centuries this region has been suffering from seasonal fluctuations of water availability. Due to climate change, this has further increased the variability in precipitation leading to ground water decline causing threat to agriculture productivity, soil erosion & scarcity of water for irrigation.

The project was designed to address these issues having interventions of construction of Check dams, farm ponds & renovation of stepwells. Tools like participatory mapping with communities along with understanding the toposheet, contours & hydrogeological surveys of the area in a micro-watershed approach was followed for identification of the feasible sites for implementation of the project component.

Project Title	Water Conservation Project (Sawai Madhopur) Rajasthan
Duration	2017 - 2018
Funding Agency	Coca Cola India
Location	Five villages of Sawai Madhopur district, Rajasthan
Coverage	193 HHs

Major Outcomes & Impacts

Construction of 5 Check Dams

Additional water storage of 93100cu.m created.
237 bigha land brought under irrigation
Asured kharif crop for the beneficiaries
Conserve and increase the retention time of rainwater restoring ecological balance in the area

Construction of 13 Farm Ponds

Additional 19804 cum storage capacity created
Facilitate recharging of ground water and store water for irrigation in the lean season.
Enables farmers to take a 2nd crop or experiment with new crop like planting fruit trees, etc.

Renovation 2 Step Wells (Bavdis)

Bavdis help recharge the ground water to avail water in the nearby wells and bore wells
Upkeep of traditional bavdi for water storage during the rainy season

Mozambique Climate Resilience Pilot Project

Empowering local communities through resource development

AFPRO partnering with IDH launched a pilot project in October 2016 titled "Mozambique Climate Resilience Project" to address the agrarian crisis through water resource management and allied activities for improving the production and de-risk the farmers' livelihood from climate variability. The agro-climatic zones in Mozambique range from arid and semi-arid (mostly in the south and south-west) to the sub-humid zones (mostly in the center and the north) to the humid high lands (mostly the central provinces). Due to the diverse agro climatic settings cropping pattern has regional variations. Predominantly agriculture in Mozambique is of subsistence in nature with domination of food crops like maize, cassava, rice, beans and vegetables. Farming is the primary source of income for the people in rural areas. Under cash crop, Cotton is one of the important potential agricultural export crops and one of the major sources of income for rural households in central and northern Mozambique.

Climate variability poses serious challenges to the production system where farming is being done by traditional practices and no efforts are made to improve water management and cropping practices. There are three pilot sites identified in northern Mozambique along with Cotton Concessionaire Partners. The purpose of pilot phase is to demonstrate climate resilient intervention by adopting watershed development approach and build the local level capacity for managing the intervention. For the selection of pilot project sites, village selection criteria were developed and mutually agreed up on among partners for launching the pilot project.

Project Title	Mozambique Climate Resilience Programme Phase II
Duration	September 2017 - December 2018
Funding Agency	IDH Sustainable Trade Inititative
Location	Mozambique
Coverage	2546 families

Interventions

Farm pond and check dam construction:

- 429 families in five villages harvested water for agriculture and enhanced productivity

Retention wall and water diversion Channel

- 1 water diversion channel constructed for 5 villages covering 2846 farmers
- 3 earthen dam/nallah bund constructed at 2 villages
- 3 recharge wells constructed through open well and bore well

Soil Conservation and Land Development

- 10 no. of gully plugs and 9862 m counter bund constructed
- Water Absorption Trench(WAT): 6862m of WAT system designed
- 5 no. of open well lift irrigation system designed

Crop Diversification

- 2 different group of farmers (50) started double cropping backyard cultivation in the last season.

Access to solar energy

- 5 solar systems-community level access to energy intervention, consists of a small number (3-4) solar panels to provide mobile charging points and 2 LED lights.

Impacts

- More than 7000 m3 of water harvested, 30 farmers benefitted, 25 to 30 Ha of land converted from barren land to cultivable land and farmers started to grow second crop for the season
- Water storage capacity increased to 7384 m3, more than 30 farmers benefitted, and 35 Ha land irrigated
- 600 m3 water harvested; 4 farmers benefitted and 6 Ha of land irrigated
- Water storage capacity increased to 0.1 m3; 50 farmers benefitted and 60 ha of land irrigated
- Ground water level increased and quality also enhanced; area to benefit 35 Ha, 25 Farmers
- Control soil erosion & increase soil moisture, > 220 Ha area
- Water harvesting, control erosion and increase soil moisture, > 10 Mm^3 water will be recharge potential. 15 families accessed to drinking water
- 50 hectare of land benefitted with double crop production. 117 farmers from 5 villages benefited.
- lights & information dissemination facilitated with this intervention.

Construction of farm pond

Digging of open well

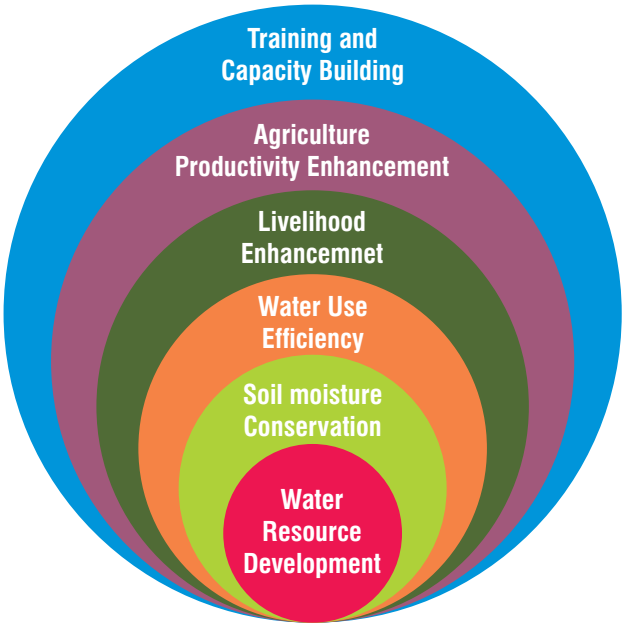
Bajaj Water Conservation Project

Mitigating Water crisis amidst climate change

Realizing the distressed conditions of the marginal farmers in Gangapur block of Aurangabad district where crop productivity shows declining trend due to the impact of climate variability, unscientific agricultural practices, poor soil health, lack of irrigation facilities, a Water Conservation Project was designed with support of Bajaj Auto Ltd. With focus on Water conservation and land management with participatory, equitable water management approach a five year project started in 22 villages of Gangapur Block to address the major problems associated with the project villages.

Project Title	Bajaj Water Conservation
Duration	November 2017 - March 2022
Funding Agency	Bajaj Auto Ltd
Location	22 Villages in Gangapur block of Aurangabad district
Coverage	5057 Households with 27576 population covering 12669 ha

MAJOR FOCUS AREAS



OUTCOME & IMPACT

Due to Nallah widening and deepening work, the ground water recharge increased in the adjoining wells making available water for critical irrigation

MAJOR OUTPUTS

Water Resource Developement (WRD)

- Nallah deepening & widening (NDW) work completed in one village and in another five 5 villages started the work which will help increase water storage capacity.
- Desiltation of percolation tank work is in progress in one village

Training & Capacity Building:

- Village Developement Committees (VDC) formed in 3 villages through gramsabha.
- 3 nos. of exposure visits conducted to know about the successful practices of watershed management
- Training for Gram Panchayat members conducted in one village for their roles & responsibilities in executing the project.
- 7 Self Help Groups (SHG) formed.
- 15 Mass Awareness Training organized on project activities
- 5 Awareness programme on Health & Hygiene conducted in 5 villages.
- 5 User Groups (UG)formed for NDW work and PT desiltation work.

Sustainability Approach

Formation of various CBOs (Community Based Organizations) like VWC (village water shed committees) users Group and SHGs, and capacitating them to function as leaders, facilitators and resource mobilizers for continuous community development is the main approach adopted for sustainability. Emphasis is given on water use efficiency, sustainable ground water recharge, in situ soil moisture conservation and arresting surface runoff, promotion of climate resilient agriculture practices and skilling and upgrading the community for micro enterprises. Through participatory approach and active involvement of the community at every stage, the ownership of the programme and assets created is ensured for sustainability and future expansion.

Monitoring, Evaluation, Learning & Documentation (MELD)

Integrated Watershed Management Programme (IWMP) is a joint programme of Central and State government. It is implemented on the basis of Common Guidelines-2008 (revised 2011) for watershed projects, implemented through Water Conservation Departments of the respective districts. Common Guidelines lay strong emphasis on MELD as a programme policy to bring about tangible effects on the water shed management.

AFPRO is working as a MELD agency from 2013 for Pune Agricultural division covering 93 Projects in Pune, Ahmednagar and Solapur district. The Monitoring, Evaluation, Impact Assessment activities are carried out periodically and the reports are submitted to Vasundhara Watershed Development Agency, Pune by AFPRO in order to track the real time progress and performance of the project.

Project Title	Monitoring Evaluation, Learning & Documentation (MELD)
Duration	August 2013 - July 2018
Funding Agency	Vasundhara Watershed Development Agency. Govt. of Maharashtra
Location	Pune Division (Ahmednagar, Pune & Solapur)
Coverage	93 IWMP projects


Impact assessment study in Solapur


Impact assessment study in Ahmednagar

ACTIVITIES CARRIED OUT BY AFPRO AS A MELD AGENCY:

- **Participation in meetings / consultations:** AFPRO participated in all the meetings and consultations organized by Vasundhara Watershed Development agency. We conducted meetings with JDA and SAOs for preparation of monitoring and evaluation plan.
- **Concurrent Process Monitoring and Compliance Tracking:** AFPRO conducted Concurrent Process monitoring and Compliance Tracking monitoring monthly. Out of total 31 projects from Batch-III and IV, half of the projects were covered under process monitoring and the rest half of the projects were covered under compliance tracking monitoring in each month. The reports were submitted to additional CEO and JDA Pune. The purpose of these reports is to track the real time progress and recommend the project authorities for mid-time correction in order to take the necessary steps for effective implementation of the project.
- **Thematic study on Rapid Impact Assessment of Batch-I Project:** The assessment study was carried out in Solapur and Pune district, using structured interviews with key informant, focus group discussion, well inventory etc. The Purpose of this study was to assess the impact of the IWMP in the Batch-I Projects on socio-economic condition of the people in the project area. The post situation is compared with the baseline situation on major programme indicators. The report has been prepared and submitted to VWDA for information and necessary action.

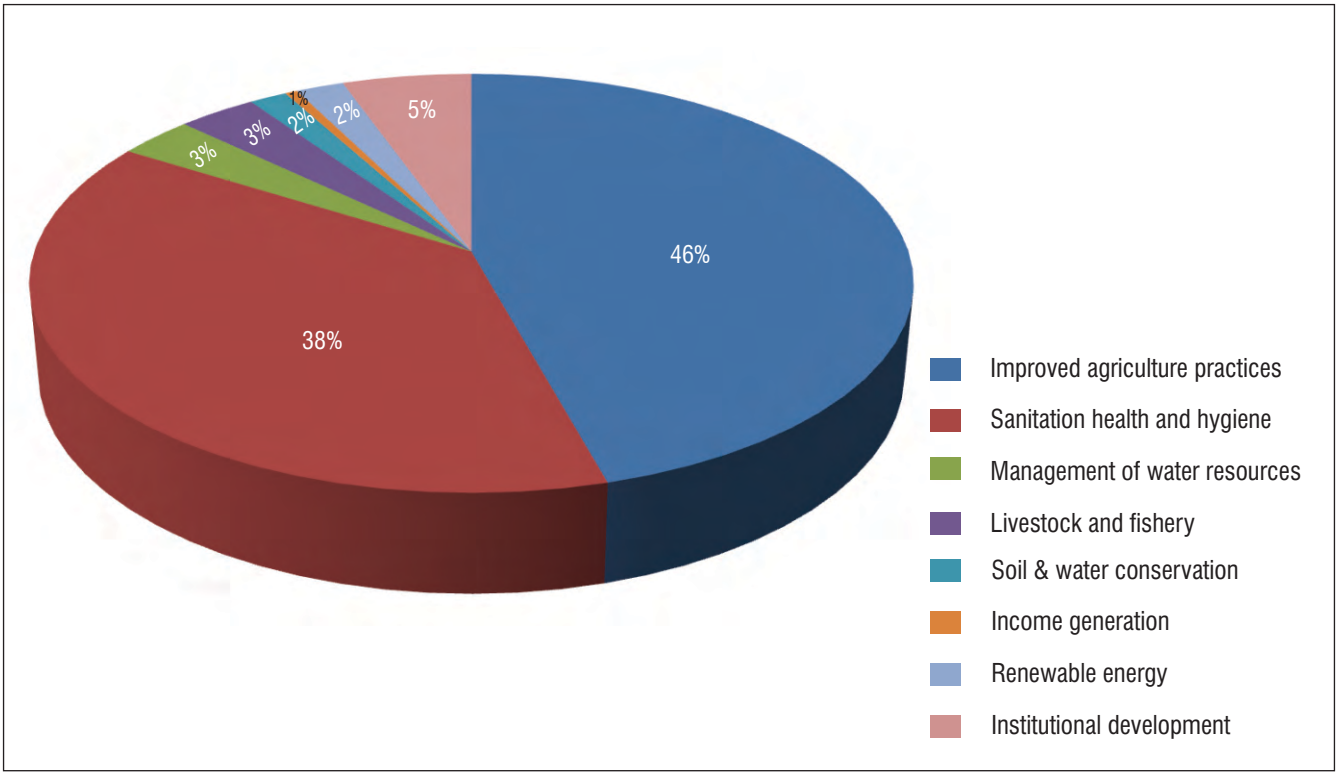

Impact assessment study in Pune


Impact assessment study in Ahmednagar

Human & Institutional Development

Developing human resources, nurturing and capacitating the local institutions are inbuilt strategies of AFPRO for achieving sustainable development among the marginalized communities. Focusing on transfer of simple and effective technologies, skills and knowledge appropriate to develop and manage natural resources towards sustainable livelihood along with equitable and inclusive growth, AFPRO has committed itself extensively in designing programme, organising training and capacity building events at various levels, creating an enabling environment that would facilitate human and resource development and building linkages to empower and transform the local bodies into institutions of reference. Overall emphasis has been given on developing human resources and leadership that would guarantee a stable and sustainable economic development leading to enhanced quality of human life.

Thematic representation of human resource development & capacity building activities



AFPRO
Action For Food Production

ACTION FOR FOOD PRODUCTION : NEW DELHI
BALANCE SHEET AS AT 31ST MARCH 2018

Particulars		31st March 2018 (RS.)
SOURCES OF FUNDS		
Funds and Reserve		73,506,535.40
Programme Balances		130,940,403.67
TOTAL		**204,446,939.07**
Application of funds		
A) Fixed Assets		
i)	Gross Block	57,701,183.55
ii)	Less: Depreciation	48,050,519.54
iii)	Net Block	9,650,664.01
iv)	Capital Work in Progress	-
		9,650,664.01
B)	**Investments**	64,289,548.00
C)	**Current Assets**	
i)	Interest Accrued on Deposits	3,883,649.27
ii)	Recoverables & Prepaid Expenses	4,127,266.20
iii)	Cash & Bank Balances	131,218,785.14
		139,229,700.61
D) Less: Current Liabilities & Provisions		8,722,973.55
Net Current Assets		130,506,727.06
TOTAL		**204,446,939.07**
Significant Accounting Policies & Notes to the Accounts		

The Schedules referred to above form an integral part of the Income & Expenditure Account.

As per Books of Account, explanations & information provided to us

Cyriac Mathew
Manager – Adm & Finance

D. K. Manavalan IAS (Retd.)
Executive Director

(Martin P. Pinto F.C.A.)
(Membership No. 085006)
for Pinto M. P. & Associates
Chartered Accountants
Firm Regn. No. 006002N

Place: New Delhi
Date: 17.09.2018

ACTION FOR FOOD PRODUCTION : NEW DELHI
INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDED 31ST MARCH 2018

Particulars	31st March 2018 (RS.)
INCOME	
Programme Contributions	782,964.00
Miscellaneous receipts	114,788.02
Sale/Disposal of Assets / Old Items	332,141.00
Interest – Savings & Deposits	3,321,971.60
TOTAL	**4,551,864.62**
EXPENDITURE	
Core Integrated Development Programme	
Human and Institutional Development	449,861.00
Socio – Technical Personnel Cost	28,046,938.21
Outreach Support	915,851.50
Information Services	389,843.00
Administrative Cost	
Admn. – Personnel Cost	7,695,877.75
Outreach Support	149,669.00
Office Expenses	4,411,799.41
Hired Services	2,856,263.00
Capital Expenses	115,167.00
ED's Discretionary Fund	44,337.00
	45,075,606.87
Excess of Expenditure over Income Transferred to:	
Programme Fund	(40,523,742.25)
TOTAL	**4,551,864.62**
Significant Accounting Policies & Notes to the Accounts	

The Schedules referred to above form an integral part of the Income & Expenditure Account.

As per Books of Account, explanations & information provided to us

Cyriac Mathew
Manager – Adm & Finance

D. K. Manavalan IAS (Retd.)
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(Martin P. Pinto F.C.A.)
(Membership No. 085006)
for Pinto M. P. & Associates
Chartered Accountants
Firm Regn. No. 006002N

Place: New Delhi
Date: 17.09.2018

SIGNIFICANT ACCOUNTING POLICIES & NOTES TO ACCOUNTS

1. Significant Accounting Policies:

(i). Basis of Accounting:

The financial statements have been drawn up under historical cost conventions, on accrual basis of accounting.

(ii). Revenue Recognition

a) Contribution received towards the core programme is recognized as income to the extent of the expenditure incurred on this programme. Contributions, grants, donations and receipts received without any specific direction are recognized as income.

b) Funds received for a particular programme / project (other than the core programme) are recognized as Programme Contributions in the Balance Sheet and expenditure incurred against such funds is reflected against the particular fund. The unutilized portion of such contributions, grants, donations are retained as part of Programme Balances for utilization as per the donors' directions. Where AFPRO meets the stipulations provided for accessing particular funds for its own use, such income is transferred to a Programme Fund forming part of Funds and Reserve in the Balance Sheet.

c) Interest earned on savings bank accounts is reflected in the income and expenditure account after allocation of such interest derived on unutilised donor funds, which is allocated to the relevant programme balance accounts and in the case of the core contributions it is recognized as income and forms part of such core contributions.

d) Interest earned on investments allocated for a particular fund is credited directly to that particular fund. Interest earned on other investments i.e. fixed deposits placed for more that one year, is credited directly to the general reserve.

e) Foreign Contributions are accounted for on the basis of the credit advice received from the bank.

(iii) Fixed Assets :

Fixed Assets are stated in the Balance Sheet net of depreciation, with a corresponding credit to the Capital Fund Account. Assets received as donation in kind, are incorporated at a value stated by the donor and adjusted for depreciation.

The cost of assets is charged in full to the relevant programme in the year of acquisition. Cost of acquisition is inclusive of freight, duties, levies and any directly attributable cost of bringing the assets to their working condition for intended use.

(iv) Depreciation :

Depreciation on fixed assets are charged on the Written Down Value (WDV) method at the rates prescribed under the Income Tax Rules with a credit of the assets account and correspondingly reflected in the Capital Fund Account.

(v) Investments :

Investments include long term fixed deposits having a maturity period exceeding one year at the time of placing the deposit and reflects principal amount placed as deposit. Mutual funds reflects the amount invested.

(vi) Retirement Benefits :

Contribution to Provident Fund is charged to the relevant programme as attributable to the concerned staff. Encashment of leave at the time of retirement is permissible and in special cases at the discretion of the management during the tenure of employment. A Group Leave Encashment Scheme insurance policy to cover the liability has been taken with Life Insurance Corporation of India (LIC). The amount paid to LIC is charged to the revenue. Gratuity payments are covered under the Group Gratuity Scheme of Life Insurance Corporaion of India (LIC). The premium paid during the year is charged to revenue.

2. NOTES TO ACCOUNTS

(i) Action for Food Production has been notified by the Government of India as an institution of national importance in terms of Section 10(10C)(viic) of the Income Tax Act 1961.

(ii) No provision for taxation has been made as the Society is registered under Section 12A of the Income Tax Act 1961 and claims exemption under Section 11 of the Income Tax Act 1961.

Contact us

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